



TIMBER NOTICE OF SALE

SALE NAME: CRUSH

AGREEMENT NO: 30-100998

AUCTION: November 16, 2021 starting at 10:00 a.m., **COUNTY:** Thurston
South Puget Sound Region Office, Enumclaw, WA

SALE LOCATION: Sale located approximately 18 miles southwest of Olympia.

**PRODUCTS SOLD
AND SALE AREA:**

All timber, except leave trees bounded out by yellow leave tree area tags, snags, and down timber existing more than 5 years from the day of sale, bounded by the following: white Timber Sale Boundary tags, the B-7200 and B-7210 roads, property line marked with Carsonite posts, and timber type change marked with pink flagging in Unit #1; white Timber Sale Boundary tags, timber type change marked with pink flagging, the Loki Trail, and the B-7000 Road in Unit #2; white Timber Sale Boundary tags and timber type change marked with pink flagging in Units #3 and #5; white Timber Sale Boundary tags in Unit #4;

All timber, except one log as required per Road Plan clause 3-6, bounded by orange right of way tags in Unit #6 and Unit #8, except title to the timber within the right of way boundary tags is not conveyed to the Purchaser unless the associated KC-0128 or KC-0123 Road is actually constructed;

All timber, except trees marked with two bands of blue paint, bounded by orange right of way tags in Unit #7, except title to the timber within the right of way boundary tags is not conveyed to the Purchaser unless the associated KC-0123 Road is actually constructed.

All forest products above located on part(s) of Sections 13, 23 and 24 all in Township 18 North, Range 4 West, W.M., containing 140 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: PwC-SFIFM-513) and FSC 100% raw materials under the Forest Stewardship Council® Standard (cert no: BV-FM/COC-080501).

ESTIMATED SALE VOLUMES AND QUALITY:

Species	Avg DBH	Ring Count	Total MBF	MBF by Grade								UT
				1P	2P	3P	SM	1S	2S	3S	4S	
Douglas fir	27.1	7	4,183				158		3,711	254	60	
Red alder	15.2		991						300	275	416	
Hemlock	14.1	9	638						294	201	143	
Maple	19.2		187						137	3	47	
Red cedar	22.4		151							138	13	
Sale Total			6,150									

MINIMUM BID: \$2,567,000.00

BID METHOD: Sealed Bids

**PERFORMANCE
SECURITY:**

\$100,000.00

SALE TYPE: Lump Sum

EXPIRATION DATE: October 31, 2023

ALLOCATION: Export Restricted



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BID DEPOSIT: \$256,700.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Harvesting activities are estimated to be 33 percent cable and 67 percent ground based harvest. Cable and cable-tethered equipment allowed on all slopes. Ground based equipment is limited to tracked equipment, with non-tethered self-leveling equipment limited to sustained slopes of 55 percent or less, all other tracked equipment limited to sustained slopes that are 45 percent or less. Rubber tired skidders not allowed, except 6-wheeled rubber tired skidders with over-the-tire tracks spanning both sets of rear tires are allowed on sustained slopes that are 45 percent or less. Yarding may be restricted during wet weather if rutting becomes excessive, per clause H-017.

ROADS: 40.59 stations of optional construction. 8.78 stations of optional reconstruction. 702.16 stations of required prehaul maintenance. 29.49 stations of abandonment, if constructed. Purchaser maintenance on the B-7200ext, B-7210, B-7212, B-6008, KC-0123, KC-0127, KC-0128, SR8-1, and portions of the B-7000 that are directly adjacent to harvest units. Designated maintenance on all other roads used.

Rock for this proposal may be obtained from the State owned Five Forks Quarry, Porter Pass Quarry, or Stinkfoot Quarry, as well as from the existing stockpile at Porter Pass Quarry or Stinkfoot Quarry, at no cost to the Purchaser or any commercial rock source at the Purchaser's expense.

All road activities are not allowed from November 1 to April 30, nor on weekends or State recognized holidays, unless authorized in writing by the Contract Administrator. In addition, the following activities are not permitted unless authorized in writing by the State: the temporary fish pipe install at station 10+77 on the KC-0123 Road, and all associated road activities from station 5+38 to 13+57, will not be permitted from November 1 to June 30; all road activities associated with DOT permit ACP-60807 on SR8-1 will not be permitted from January 1 to December 31, with one 3-week exception.

The hauling of forest products will not be permitted from November 1 to April 30, nor on weekends or State recognized holidays, unless authorized in writing by the Contract Administrator. If permission is granted to operate from November 1 to April 30, preventative measures may be required to protect water, soil, roads and other forest assets.

ACREAGE DETERMINATION

CRUISE METHOD: Acreage was determined by traversing boundaries by GPS in all units, and length times width for existing roads in Unit #1. GPS data files are available at DNR's website for timber sale auction packets. See cruise narrative for cruise method.

FEES: \$104,550.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS: This sale contains high quality Douglas-fir, see cruise for details.

See map for gate locations. Gate keys may be obtained by contacting the South Puget Sound Region office at (360) 825-1631 or by contacting the Tumwater work center at (360) 628-3868.

Purchaser shall cut all hardwood stems 2 inches DBH or greater, or 6 feet tall or greater, within the harvest units, leaving a stump no more than 12 inches in height.



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KC-0123 contains a temporary fish pipe that must be installed and removed within a single hydraulic period, July 1- November 1. This crossing also requires structure placement per Road Plan 3-6 and 3-11.

Yarding corridors to B-6008 landing must be marked and approved by CA prior to harvest operations, per Schedule B-Cable Corridor Requirements for Unit #3. Upon approval by the CA, a Sale Area Adjustment will be processed per clause G-091 to include these corridors in the Sale Area.

There are blue painted trees in all units. Single blue painted trees are take trees, unless located within tagged leave tree areas.

Leave trees from a previous harvest contained in R/W Unit # 7 are marked with double blue bands of paint. These must be felled and left onsite outside the clearing limits.

The Loki trail located in Units #2-#5 will need to be restored to its pre-harvest condition following harvest per Schedule A-Recreation Trail Clean Out and Repair.

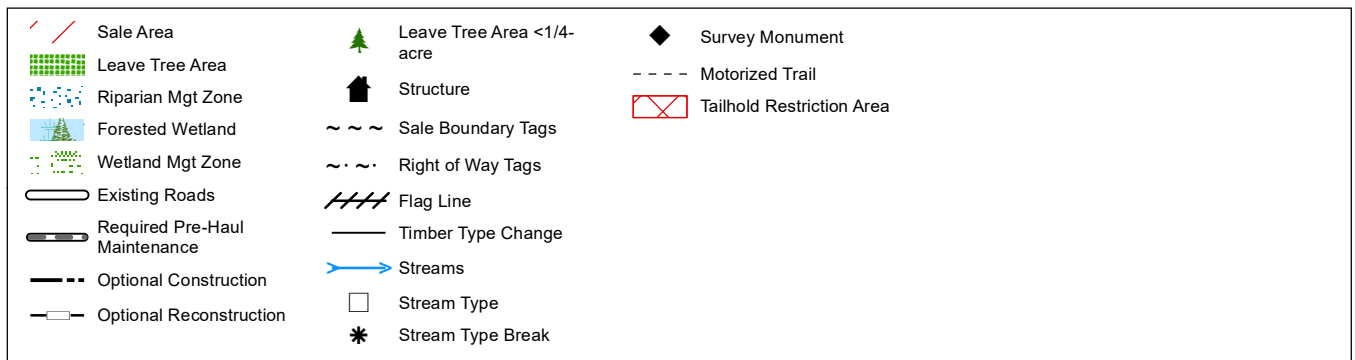
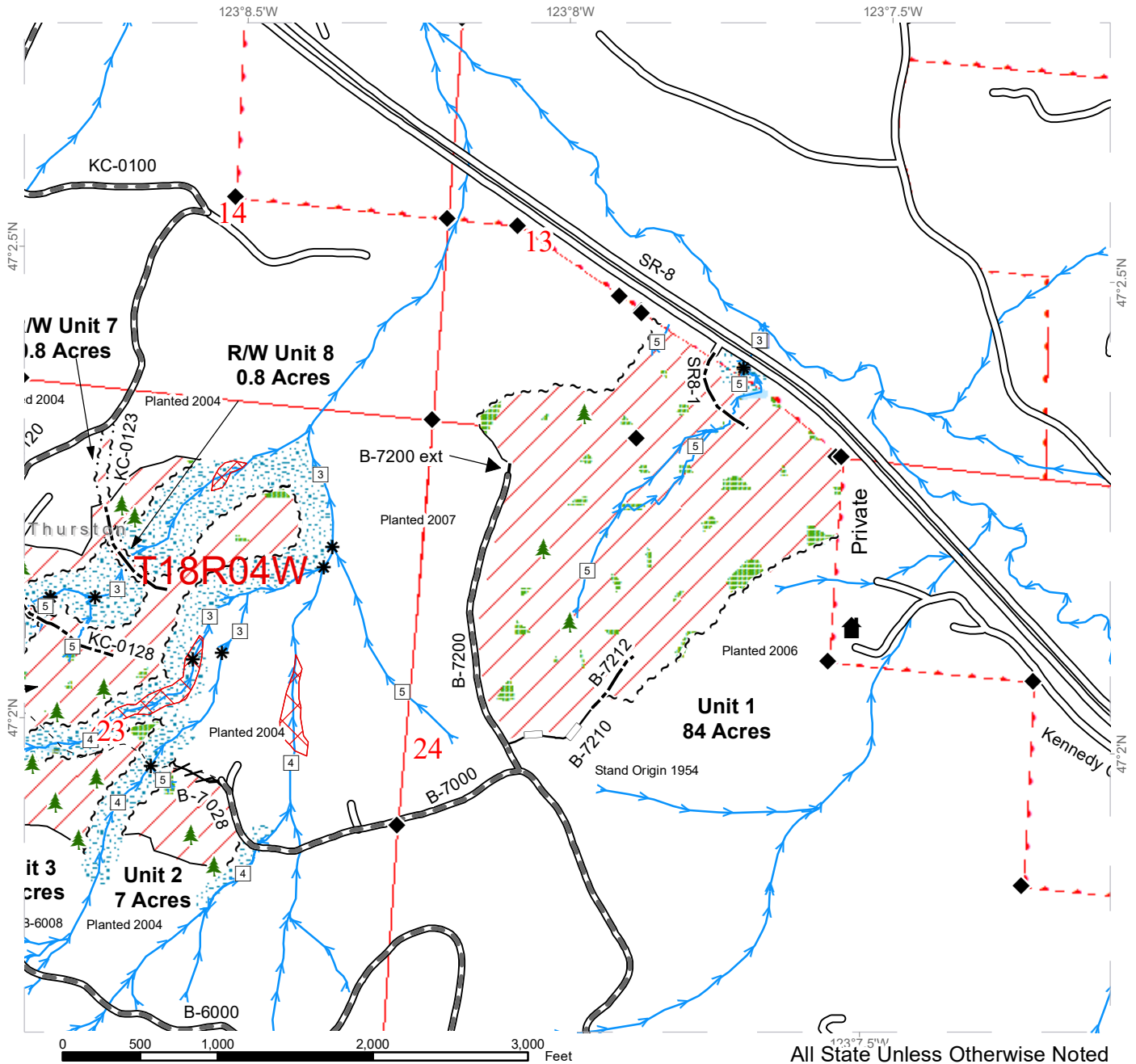
Dust shall be abated on the B-Line from stations 638+35 to 647+00 per contract clause C-130.

Purchaser is required to comply with DOT Access Permit ACP-60807, which includes specific access windows and sign requirements for work associated with SR8-1 and SR8 through WSDOT Right of Way for Unit #1.

For the safety of the public, please remove from roads and trails all string from string boxes used during appraising or cruising this sale.

TIMBER SALE MAP

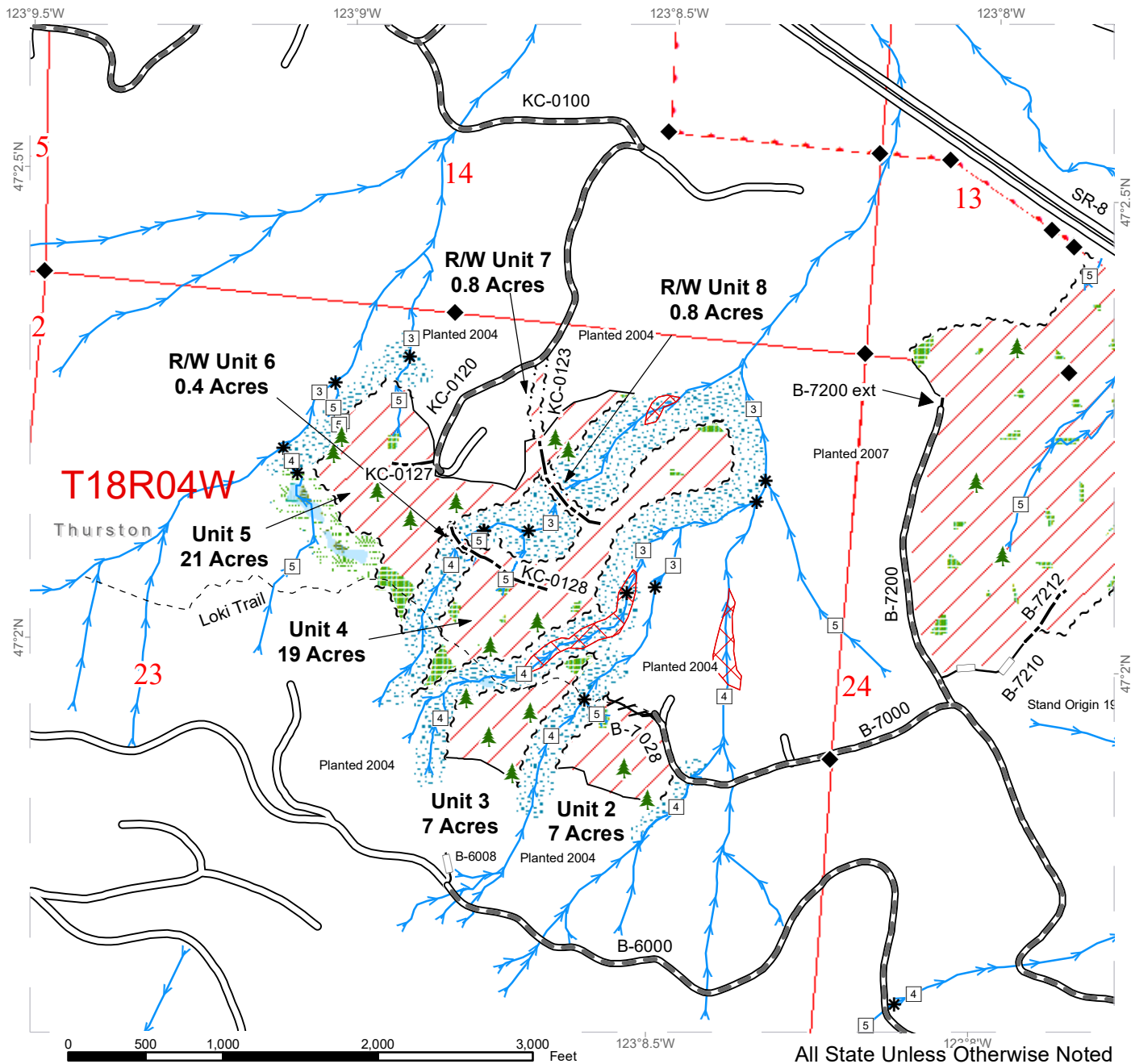
SALE NAME:	CRUSH	REGION:	South Puget Sound Region
AGREEMENT #:	30-100998	COUNTY(S):	Thurston
TOWNSHIP(S):	T18R4W	ELEVATION RGE:	520-1240
TRUST(S):	Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)		



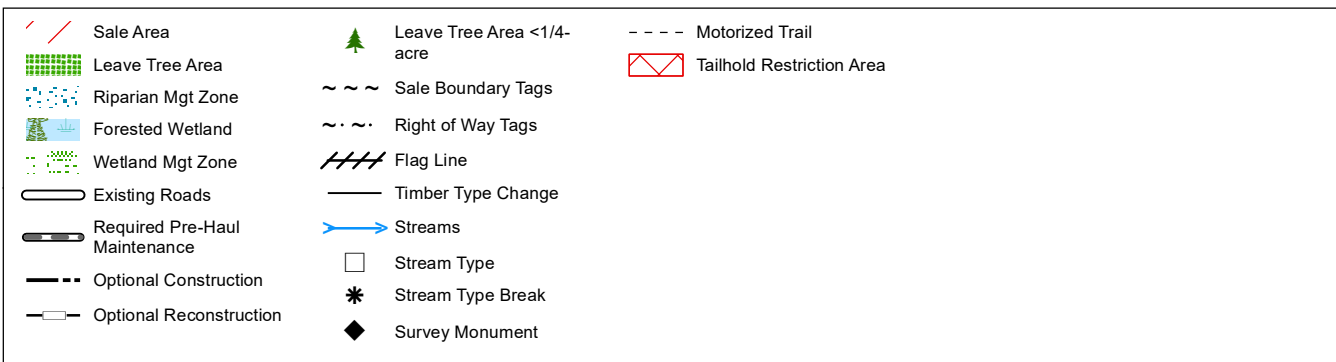
TIMBER SALE MAP

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AGREEMENT #: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Thurston
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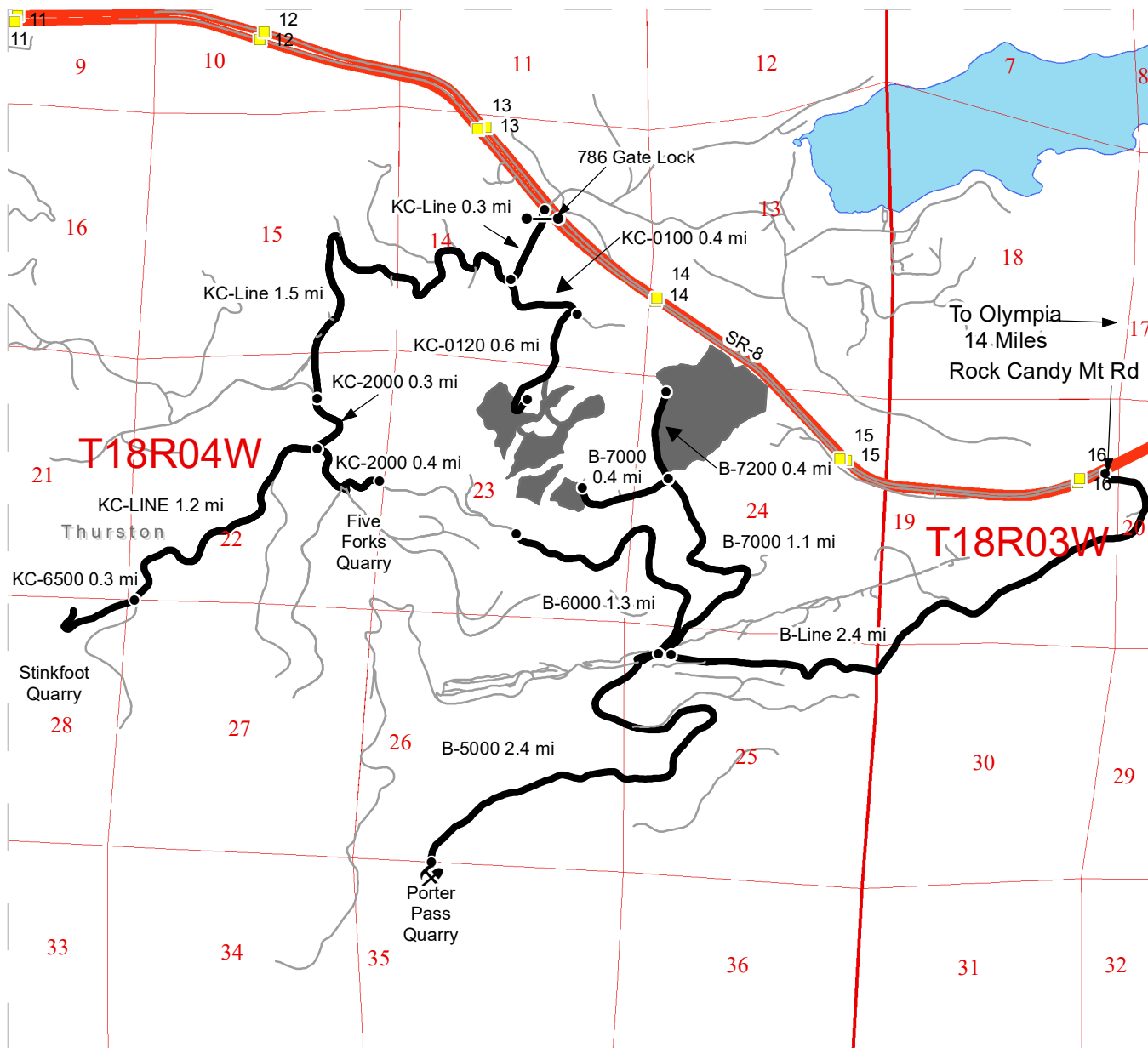
All State Unless Otherwise Noted



DRIVING MAP

SALE NAME: CRUSH
AGREEMENT#: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Thurston
ELEVATION RGE: 520-1240



Map may not be to scale

<ul style="list-style-type: none"> Timber Sale Unit Milepost Markers Distance Indicator Gate (Master 786) Rock Pit Haul Route Other Road 	<p>DRIVING DIRECTIONS:</p> <p>From eastbound US HWY 8 turn south at mile marker 16 onto Rock Candy Mountain RD SW. Continue on the B-Line for approximately 2.4 miles, turn North onto B-7000. Continue 1.1 Miles to Unit 1, continue an additional 0.4 miles to access Unit 2,3,4 via hike-in.</p> <p>From Westbound US HWY 8 Turn south 0.5 miles after mile marker 14 onto KC-Line. Continue 0.3 miles, turn east onto KC-0100, continue for 0.4 miles, turn south onto KC-0120, end of road accesses Unit 5.</p> <p>Porter Pass Quarry: From B-Line turn left onto B-5000, continue for 2.4 miles.</p> <p>Five Forks Quarry: Continue on KC-Line for 1.5 miles, turn left onto KC-2000 and continue for 0.7 miles.</p> <p>Stinkfoot Quarry: Continue on KC-Line for 1.2 miles, turn right onto KC-6500 for 0.3 miles.</p>
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**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

**BILL OF SALE AND CONTRACT FOR
FOREST PRODUCTS**

Export Restricted Lump Sum AGREEMENT NO. 30-100998

SALE NAME: CRUSH

**THE STATE OF WASHINGTON DEPARTMENT OF NATURAL
RESOURCES, HEREINAFTER ACTING SOLELY, IN ITS PROPRIETARY
CAPACITY, STATE, AND PURCHASER, AGREE AS FOLLOWS:**

Section G: General Terms

G-001 Definitions

The following definitions apply throughout this contract;

Bill of Sale and Contract for Forest Products: Contract between the Purchaser and the State, which sets forth the procedures and obligations of the Purchaser in exchange for the right to remove forest products from the sale area. The Bill of Sale and Contract for Forest Products may include a Road Plan for any road construction or reconstruction, where applicable.

Contract Administrator: Region Manager's designee responsible for assuring that the contractual obligations of the Purchaser are met.

Forest Product: Any material derived from the forest for commercial use.

Purchaser: The company or individual that has entered into a Bill of Sale and Contract for Forest Products with the State for the right to harvest and remove forest products from the timber sale area.

Road Construction: Includes building new and maintaining existing forest roads and associated work that may be optional or required as described in the Road Plan.

State: The Washington State Department of Natural Resources, landowner and seller of Forest Products from the timber sale area. The State is represented by the Region Manager as designated on the contract signature page. Contractual obligations to the State are enforced by the Region Manager or the designated Contract Administrator.

Subcontractor: Individual or company employed by the Purchaser to perform a portion or all of the services required by The Bill of Sale and Contract for Forest Products. The Purchaser is responsible for independently negotiating, procuring and paying for all subcontracted services rendered.

G-011 Right to Remove Forest Products and Contract Area

Purchaser was the successful bidder on November 16, 2021 and the sale was confirmed on _____. The State, as owner, agrees to sell to Purchaser, and Purchaser agrees to purchase as much of the following forest products as can be cut and removed during the term of this contract: All timber, except leave trees bounded out by yellow leave tree area tags, snags, and down timber existing more than 5 years from the day of sale, bounded by the following: white Timber Sale Boundary tags, the B-7200 and B-7210 roads, property line marked with Carsonite posts, and timber type change marked with pink flagging in Unit #1; white Timber Sale Boundary tags, timber type change marked with pink flagging, the Loki Trail, and the B-7000 Road in Unit #2; white Timber Sale Boundary tags and timber type change marked with pink flagging in Units #3 and #5; white Timber Sale Boundary tags in Unit #4;

All timber, except one log as required per Road Plan clause 3-6, bounded by orange right of way tags in Unit #6 and Unit #8, except title to the timber within the right of way boundary tags is not conveyed to the Purchaser unless the associated KC-0128 or KC-0123 Road is actually constructed;

All timber, except trees marked with two bands of blue paint, bounded by orange right of way tags in Unit #7, except title to the timber within the right of way boundary tags is not conveyed to the Purchaser unless the associated KC-0123 Road is actually constructed.

All forest products above located on approximately 140 acres on part(s) of Sections 13, 23, and 24 all in Township 18 North, Range 4 West W.M. in Thurston County(s) as designated on the sale area and as shown on the attached timber sale map.

All forest products described above from the bole of the tree that meet or exceed 2 inches diameter inside bark on the small end are eligible for removal. Above ground components of a tree that remain as by-products after the manufacture of logs, including but not limited to tree tops, branches, limbs, needles, leaves, stumps, are not eligible for removal under the terms of this contract.

Forest products purchased under a contract that is designated as export restricted shall not be exported until processed. Forest products purchased under a contract that is designated as exportable may be exported prior to processing.

G-020 Inspection By Purchaser

Purchaser hereby warrants to the State that they have had an opportunity to fully inspect the sale area and the forest products being sold. Purchaser further warrants to the State that they enter this contract based solely upon their own judgment of the value of the forest products, formed after their own examination and inspection of both the timber sale area and the forest products being sold. Purchaser also warrants to the State that they enter this contract without any reliance upon the volume estimates, acreage estimates, appraisals, pre-bid documentation, or any other representations by the State Department of Natural Resources.

G-025 Schedules

The following attached schedules are hereby incorporated by reference:

Schedule	Title
A	Recreation Trail Clean Out and Repair
B	Cable Corridor Requirements for Unit #3

G-031 Contract Term

Purchaser shall complete all work required by this contract prior to October 31, 2023.

G-040 Contract Term Adjustment - No Payment

Purchaser may request an adjustment in the contract term. A claim must be submitted in writing and received by the State within 30 days after the start of interruption or delay. The claim must also indicate the actual or anticipated length of interruption or delay. The State may grant an adjustment without charge only if the cause for contract term adjustment is beyond Purchaser's control. The cause must be one of the following and the adjustment may be granted only if operations or planned operations under this contract are actually interrupted or delayed:

- a. Road and bridge failures which deny access.
- b. Access road closures imposed by road owner.
- c. Excessive suspensions as provided in clause G-220.
- d. Regulatory actions not arising from Purchaser's failure to comply with this contract which will prevent timber harvest for a period less than 6 months.

G-051 Contract Term Extension - Payment

Extensions of this contract term may be granted only if, in the judgment of the State, Purchaser is acting in good faith and is endeavoring to remove the forest products conveyed. The term of this contract may be extended for a reasonable time by the State if all of the following conditions are satisfied:

- a. A written request for extension of the contract term must be received prior to the expiration date of the contract.
- b. Completion of all required roads and compliance with all contract and regulatory requirements.
- c. For the first extension, not to exceed 1 year, payment of at least 25 percent of the total contract price.

For the second extension, not to exceed 1 year, payment of at least 90 percent of the total contract price.

The payments shall not include the initial deposit which shall be held according to the provisions of RCW 79.15.100.

- d. Payment of an amount based on 12 percent interest per annum on the unpaid portion of the total contract price.

All payments, except the initial deposit, will be deducted from the total contract price to determine the unpaid portion of the contract.

- e. Payment of \$1,079.00 per acre per annum for the acres on which an operating release has not been issued in the harvest area.
- f. In no event will the extension charge be less than \$200.00.
- g. Extension payments are non-refundable.

G-053 Surveys - Sensitive, Threatened, Endangered Species

Whenever the State determines that a survey for sensitive, threatened, or endangered species is prudent, or when Purchaser determines a survey is prudent and the State agrees, Purchaser shall perform such surveys at Purchaser's expense and to the standards required by the State. The survey information shall be supplied to the State.

G-060 Exclusion of Warranties

The PARTIES AGREE that the IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE and ALL OTHER WARRANTIES EXPRESSED OR IMPLIED ARE EXCLUDED from this transaction and shall not apply to the goods sold. For example, THE FOLLOWING SPECIFIC MATTERS ARE NOT WARRANTED, and are EXCLUDED from this transaction:

- a. The MERCHANTABILITY of the forest products. The use of the term "merchantable" in any document is not intended to vary the foregoing.
- b. The CONDITION of the forest products. The forest products will be conveyed "AS IS."

- c. The ACREAGE contained within any sale area. Any acreage descriptions appearing in the timber notice of sale, timber sale contract, or other documents are estimates only, provided solely for administrative and identification purposes.
- d. The VOLUME, QUALITY, OR GRADE of the forest products. The State neither warrants nor limits the amount of timber to be harvested. The descriptions of the forest products to be conveyed are estimates only, made solely for administrative and identification purposes.
- e. The CORRECTNESS OF ANY SOIL OR SURFACE CONDITIONS, PRE-SALE CONSTRUCTION APPRAISALS, INVESTIGATIONS, AND ALL OTHER PRE-BID DOCUMENTS PREPARED BY OR FOR THE STATE. These documents have been prepared for the State's appraisal purposes only.
- f. THAT THE SALE AREA IS FREE FROM THREATENED OR ENDANGERED SPECIES or their habitat. The State is not responsible for any interference with forestry operations that result from the presence of any threatened or endangered species, or the presence of their habitat, within the sale area.
- g. THAT THE FORESTRY OPERATIONS to be performed under this contract WILL BE FREE FROM REGULATORY ACTIONS by governmental agencies. The State is not responsible for actions to enforce regulatory laws, such as the Washington Forest Practices Act (chapter 76.09 RCW), taken by the Department of Natural Resources or any other agency that may affect the operability of this timber sale.
- h. Items contained in any other documents prepared for or by the State.

G-062 Habitat Conservation Plan

The State has entered into a Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services) to address state trust land management issues relating to compliance with the Federal Endangered Species Act. The activities to be carried out under this contract are located within the State's HCP area and are subject to the terms and conditions of the HCP, and the Services' Incidental Take Permit Nos. TE812521-1 and 1168 (collectively referred to as ITP), or as amended hereafter by the Services. The ITP authorizes the incidental take of certain federally listed threatened and endangered species, as specified in the ITP conditions. All HCP materials, including the ITP, are available for review at the State's Regional Offices and the administrative headquarters in Olympia, Washington.

By signing this contract, Purchaser agrees to comply with the terms and conditions of the ITP, and the HCP, which shall become terms of this contract. The State agrees to authorize the lawful activities of the Purchaser carried out pursuant to this contract, PROVIDED the Purchaser remains in compliance with the terms and conditions of both

the HCP and ITP. The requirements set forth in this contract are intended to comply with the terms and conditions of the HCP and ITP. Accordingly, non-compliance with the terms and conditions of the HCP and ITP will render the authorization provided in this paragraph void, be deemed a breach of the contract and may subject Purchaser to liability for violation of the Endangered Species Act.

Any modifications to the contract shall be proposed in writing by Purchaser, shall continue to meet the terms and conditions of the HCP and ITP, and shall require the prior written approval of the Region Manager before taking effect.

G-063 Incidental Take Permit Notification Requirements

- a. Purchaser shall immediately notify the Contract Administrator of new locations of permit species covered by the Incidental Take Permits (ITP) that are discovered within the area covered by the State's Habitat Conservation Plan (HCP), including, but not limited to: locations of occupied murrelet habitat; spotted owl nest sites; wolves; grizzly bears; nests, communal roosts, or feeding concentrations of bald eagles; peregrine falcon nests; Columbian white-tailed deer; Aleutian Canada geese; Oregon silverspot butterflies; and additional stream reaches found to contain bull trout. Purchaser is required to notify the Contract Administrator upon discovery of any fish species found in streams or bodies of water classified as non-fish bearing. In all circumstances, notification must occur within a 24 hour time period.
- b. Upon locating any live, dead, injured, or sick specimens of any permit species covered by the ITP, Purchaser shall immediately notify the Contract Administrator. Purchaser shall notify the Contract Administrator if there is any doubt as to the identification of a discovered permit species. Purchaser may be required to take certain actions to help the Contract Administrator safeguard the well-being of any live, injured or sick specimens of any permit species discovered, until the proper disposition of such specimens can be determined by the Contract Administrator. Any such requirements will be explained to Purchaser by the Contract Administrator during the Pre-Work Conference. In all circumstances, notification must occur within a 24 hour time period.
- c. Purchaser shall refer to a specific ITP number, ITP TE812521-1 or ITP 1168 (copies which are located in the region office) in all correspondence and reports concerning permit activities.
- d. Provisions and requirements of the ITP shall be clearly presented and explained to Purchaser by Contract Administrator during the Pre-Work Conference as per contract clause G-330. All applicable provisions of the ITP and this schedule must be presented and clearly explained by Purchaser to all authorized officers, employees, contractors, or agents of Purchaser conducting authorized activities in the timber sale area. Any questions Purchaser may have about the ITP should be directed to the Contract Administrator.

G-064 Permits

Purchaser is responsible for obtaining any permits not already obtained by the State that relate to Purchaser's operation. Forest Practice Application / Hydraulic Project Approval permits obtained by the State shall be transferred to Purchaser. Purchaser is responsible for all permits, amendments and renewals.

G-065 Regulatory Disclaimer

The State disclaims any responsibility for, or liability relating to, regulatory actions by any government agency, including actions pursuant to the Forest Practices Act, Ch. 76.09 RCW that may affect the operability of the timber sale.

G-066 Governmental Regulatory Actions

a. Risk

Purchaser shall be responsible for any increased operational costs arising from any applicable foreign or domestic governmental regulation or order that does not cause contract performance to become commercially impracticable or that does not substantially frustrate the purpose of the contract. If impracticability or frustration results from Purchaser's failure to comply with this contract, Purchaser shall remain responsible for payment of the total contract price notwithstanding the impracticability or frustration.

b. Sale Area

When portions of the sale area become subject to a foreign or domestic governmental regulation or order that will likely prevent timber harvest for a period that will exceed the expiration date of this contract, and Purchaser has complied with this contract, the following shall apply:

i. RCW 79.15.140 shall govern all adjustments to the contract area.

c. Adjustment of Price

The State shall adjust the total contract price by subtracting from the total contract price an amount determined in the following manner: The State shall cause the timber sale area subject to governmental regulation or order to be measured. The State shall calculate the percentage of the total sale area subject to the governmental regulation or order. The State shall reduce the total contract price by that calculated percentage. However, variations in species, value, costs, or other items pertaining to the affected sale area will be analyzed and included in the adjustment if deemed appropriate by the State. The State will further reduce the total contract price by the reasonable cost of unamortized roads Purchaser constructed but was unable to fully use for removing timber. A reduction in total contract price terminates all of the Purchaser's rights to purchase and remove the timber and all other interest in the affected sale area.

G-070 Limitation on Damage

In the event of a breach of any provision of this contract by the State, the exclusive remedy available to Purchaser will be limited to a return of the initial deposit, unapplied payments, and credit for unamortized improvements made by Purchaser. The State shall not be liable for any damages, whether direct, incidental or consequential.

G-080 Scope of State Advice

No advice by any agent, employee, or representative of the State regarding the method or manner of performing shall constitute a representation or warranty that said method, manner or result thereof will conform to the contract or be suitable for Purchaser's purposes under the contract. Purchaser's reliance on any State advice regarding the method or manner of performance shall not relieve Purchaser of any risk or obligation under the contract. Purchaser retains the final responsibility for its operations under this contract and State shall not be liable for any injuries resulting from Purchaser's reliance on any State advice regarding the method or manner of performance.

G-091 Sale Area Adjustment

The Parties may agree to adjustments in the sale area boundary. The cumulative changes to the sale area during the term of the contract shall not exceed more than four percent of the original sale area. If the sale area is increased, the added forest products become a part of this contract. The State shall determine the volume added and shall calculate the increase to the total contract price using the rates set forth in clause G-101, G-102, or G-103. If the sale area is reduced, the State shall determine the volume to be reduced. The State shall calculate the reduction to the total contract price using the rates set forth in clause G-101, G-102, or G-103.

G-101 Forest Products Not Designated

Any forest products not designated for removal, which must be removed in the course of operations authorized by the State, shall be approved and designated by the Contract Administrator. Added forest products become a part of this contract and the Scribner log scale volume, as defined by the Northwest Log Rules Advisory Group, shall be determined by the Contract Administrator. Added forest products shall be paid for at the following contract payment rates per Mbf Scribner log scale.

The pricing schedule has not been set for the sale.

G-106 Adding Naturally Damaged Forest Products

Any forest products not designated for removal that are seriously damaged by disease, insects or wind, or that may contribute seriously to the spread of insect or disease damage may be added to this sale by the State's Contract Administrator. Additions must be in unlogged areas of the sale and added volume shall not exceed an amount equal to 10 percent of the original advertised volume. Added forest products become a part of this contract and shall be paid for at the rate set forth in clause G-101, G-102 or G-103.

G-111 Title and Risk of Loss

Title to the forest products under this contract passes to the Purchaser after they are removed from the sale area, if adequate advance payment or payment security has been provided to the State under this contract. Purchaser bears all risk of loss of, or damage to, and has an insurable interest in, the forest products described in this contract from the time the sale is confirmed under RCW 79.15.120. Breach of this contract shall have no effect on this provision.

G-115 Forest Stewardship Council® (FSC®) Certification

Forest products purchased under this contract are FSC 100% certified as being in conformance with the Forest Stewardship Council Standard under certificate number: BV-FM/COC-080501.

G-116 Sustainable Forestry Initiative® (SFI) Certification

Forest products purchased under this contract are certified as being in conformance with the Sustainable Forestry Initiative program Standard under certificate number: PwC-SFIFM-513.

Purchaser shall have at least one person regularly on-site during active operations that have completed training according to the requirements outlined within the SFI® program Standard. Purchaser shall designate in writing the name(s) of the individual(s) who will be on-site and provide proof of their successful completion of an approved training program prior to active operations.

G-120 Responsibility for Work

All work, equipment, and materials necessary to perform this contract shall be the responsibility of Purchaser. Any damage to improvements, except as provided in clause G-121 or unless the State issues an operating release pursuant to clause G-280, shall be repaired promptly to the satisfaction of the State and at Purchaser's expense.

G-121 Exceptions

Exceptions to Purchaser's responsibility in clause G-120 shall be limited exclusively to the following. These exceptions shall not apply where road damage occurs due to Purchaser's failure to take reasonable precautions or to exercise sound forest engineering and construction practices.

The State will bear the cost to repair damages caused by a third party. In all other cases, the Purchaser shall bear responsibility for the costs as described below.

Road is defined as the road bed, including but not limited to its component parts, such as cut and fill slopes, subgrade, ditches, culverts, bridges, and cattle guards.

For the purposes of this clause, damage will be identified by the State and is defined as:

1. Failure of (a) required improvements or roads designated in clause C-050, or (b) required or optional construction completed to the point that authorization to haul has been issued;
2. Caused by a single event from forces beyond the control of Purchaser, its employees, agents, or invitees, including independent contractors; and
3. Includes, but is not limited to natural disasters such as earthquakes, volcanic eruptions, landslides, and floods.

The repair work identified by the State shall be promptly completed by Purchaser at an agreed price. The State may elect to accomplish repairs by means of State-provided resources.

For each event, Purchaser shall be solely responsible for the initial \$5,000 in repairs. For repairs in excess of \$5,000, the parties shall share equally the portion of costs between \$5,000 and \$15,000. The State shall be solely responsible for the portion of the cost of repairs that exceed \$15,000.

Nothing contained in clauses G-120 and G-121 shall be construed as relieving Purchaser of responsibility for, or damage resulting from, Purchaser's operations or negligence, nor shall Purchaser be relieved from full responsibility for making good any defective work or materials. Authorization to haul does not warrant that Purchaser built roads are free from material defect and the State may require additional work, at Purchaser's expense regardless of cost, to remedy deficiencies at any time.

G-140 Indemnity

To the fullest extent permitted by law, Purchaser shall indemnify, defend and hold harmless State, agencies of State and all officials, agents and employees of State, from and against all claims arising out of or resulting from the performance of the contract. "Claim" as used in this contract means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorneys' fees, attributable for bodily injury, sickness, disease or death, or injury to or destruction of tangible property including loss of use resulting therefrom. Purchaser's obligations to indemnify, defend, and hold harmless includes any claim by Purchaser's agents, employees, representatives, or any subcontractor or its employees. Purchaser expressly agrees to indemnify, defend, and hold harmless State for any claim arising out of or incident to Purchaser's or any subcontractors' performance or failure to perform the contract. Purchaser's obligation to indemnify, defend, and hold harmless State shall not be eliminated or reduced by any actual or alleged concurrent negligence of State or its agents, agencies, employees and officials. Purchaser waives its immunity under Title 51 RCW to the extent it is required to indemnify, defend and hold harmless State and its agencies, officials, agents or employees.

G-150 Insurance

Purchaser shall, at its cost and expense, buy and maintain insurance of the types and amounts listed below. Failure to buy and maintain the required insurance may result in

a breach and/or termination of the contract at State's option. State may suspend Purchaser operations until required insurance has been secured.

All insurance and surety bonds should be issued by companies admitted to do business within the State of Washington and have a rating of A-, Class VII or better in the most recently published edition of Best's Reports. If an insurer is not admitted, all insurance policies and procedures for issuing the insurance policies must comply with Chapter 48.15 RCW and 284-15 WAC.

The State of Washington, Department of Natural Resources region office of sale origin shall be provided written notice before cancellation or non-renewal of any insurance referred to therein, in accord with the following specifications:

1. Insurers subject to Chapter 48.18 RCW (admitted and regulated by the Insurance Commissioner): The insurer shall give the State 45 days advance notice of cancellation or non-renewal. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.
2. Insurers subject to Chapter 48.15 RCW (surplus lines): The State shall be given 20 days advance notice of cancellation. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.

Before starting work, Purchaser shall furnish State of Washington, Department of Natural Resources with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements specified in the contract. Insurance coverage shall be obtained by the Purchaser prior to operations commencing and continually maintained in full force until all contract obligations have been satisfied or an operating release has been signed by the State.

Purchaser shall include all subcontractors as insured under all required insurance policies, or shall furnish separate certificates of insurance and endorsements for each subcontractor. Subcontractor(s) must comply fully with all insurance requirements stated herein. Failure of subcontractor(s) to comply with insurance requirements does not limit Purchaser's liability or responsibility.

The State of Washington, Department of Natural Resources, its elected and appointed officials, agents and employees shall be named as an additional insured via endorsement on all general liability, excess, umbrella, and property insurance policies.

All insurance provided in compliance with this contract shall be primary as to any other insurance or self-insurance programs afforded to or maintained by State. Purchaser waives all rights against State for recovery of damages to the extent these damages are covered by general liability or umbrella insurance maintained pursuant to this contract.

By requiring insurance herein, State does not represent that coverage and limits will be adequate to protect Purchaser and such coverage and limits shall not limit Purchaser's liability under the indemnities and reimbursements granted to State in this contract.

The limits of insurance, which may be increased as deemed necessary by State of Washington, Department of Natural Resources, shall not be less than as follows:

Commercial General Liability (CGL) Insurance. Purchaser shall maintain general liability (CGL) insurance, and, if necessary, commercial umbrella insurance with a limit of not less than \$1,000,000.00 per each occurrence. If such CGL insurance contains aggregate limits, the General Aggregate limit shall be at least twice the "each occurrence" limit. CGL insurance shall have products-completed operations aggregate limit of at least two times the "each occurrence" limit. CGL coverage shall include a Logging and Lumbering Endorsement (i.e. Logger's Broad-Form) to cover the events that include, but are not limited to, fire suppression expenses, accidental timber trespasses, and wildfire property damage with limits of not less than \$2,000,000.00 each occurrence.

CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 (or a substitute form providing equivalent coverage). All insurance shall cover liability arising out of premises, operations, independent contractors, products completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another party assumed in a business contract), and contain separation of insured (cross liability) condition.

Employer's Liability "Stop Gap" Insurance. Purchaser shall buy employers liability insurance, and, if necessary, commercial umbrella liability insurance with limits not less than \$1,000,000.00 each accident for bodily injury by accident or \$1,000,000.00 each employee for bodily injury by disease.

Workers' Compensation Coverage. Purchaser shall comply with all State of Washington workers' compensation statutes and regulations. Workers' compensation coverage shall be provided for all employees of Purchaser and employees of any subcontractor or sub-subcontractor. Coverage shall include bodily injury (including death) by accident or disease, which exists out of or in connection with the performance of this contract. Except as prohibited by law, Purchaser waives all rights of subrogation against State for recovery of damages to the extent they are covered by workers' compensation, employer's liability, commercial general liability, or commercial umbrella liability insurance.

If Purchaser, subcontractor or sub-subcontractor fails to comply with all State of Washington workers' compensation statutes and regulations and State incurs fines or is required by law to provide benefits to or obtain coverage for such employees, Purchaser shall indemnify State. Indemnity shall include all fines, payment of benefits to Purchaser or subcontractor employees, or their heirs or legal representatives, and the cost of effecting coverage on behalf of such employees.

Business Auto Policy (BAP). Purchaser shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit not less than \$1,000,000.00 per accident. Such insurance shall cover liability arising out of "Any Auto". Business auto coverage shall be written on ISO form CA 00 01, or substitute liability form providing equivalent coverage. If necessary the policy shall be endorsed to provide contractual liability coverage and cover a "covered pollution cost or expense" as provided in the 1990 or later editions of CA 00 01. Purchaser waives all rights against State for the recovery of damages to the extent they are covered by business auto liability or commercial umbrella liability insurance.

G-160 Agents

The State's rights and duties will be exercised by the Region Manager at Enumclaw, Washington. The Region Manager will notify Purchaser in writing who is responsible for administering the contract. The Region Manager has sole authority to waive, modify, or amend the terms of this contract in the manner prescribed in clause G-180. No agent, employee, or representative of the State has any authority to bind the State to any affirmation, representation, or warranty concerning the forest products conveyed beyond the terms of this contract.

Purchaser is required to have a person on site during all operations who is authorized to receive instructions and notices from the State. Purchaser shall inform the State in writing who is authorized to receive instructions and notices from the State, and any limits to this person's authority.

G-170 Assignment and Delegation

No rights or interest in this contract shall be assigned by Purchaser without prior written permission of the State. Any attempted assignment shall be void and ineffective for all purposes unless made in conformity with this paragraph. Purchaser may perform any duty through a delegate, but Purchaser is not thereby relieved of any duty to perform or any liability. Any assignee or delegate shall be bound by the terms of the contract in the same manner as Purchaser.

G-180 Modifications

Waivers, modifications, or amendments of the terms of this contract must be in writing signed by Purchaser and the State.

G-190 Contract Complete

This contract is the final expression of the Parties' agreement. There are no understandings, agreements, or representations, expressed or implied, which are not specified in this contract.

G-200 Notice

Notices required to be given under the following clauses shall be in writing and shall be delivered to Purchaser's authorized agent or sent by certified mail to Purchaser's address of record:

G-210 Violation of Contract
G-220 State Suspends Operations

All other notices required to be given under this contract shall be in writing and delivered to the authorized agent or mailed to the Party's post office address. Purchaser agrees to notify the State of any change of address.

G-210 Violation of Contract

- a. If Purchaser violates any provision of this contract, the Contract Administrator, by written notice, may suspend those operations in violation. If the violation is capable of being remedied, Purchaser has 30 days after receipt of a suspension notice to remedy the violation. If the violation cannot be remedied (such as a violation of WAC 240-15-015) or Purchaser fails to remedy the violation within 30 days after receipt of a suspension notice, the State may terminate the rights of Purchaser under this contract and collect damages.
- b. If the contract expires pursuant to clause G-030 or G-031 without Purchaser having performed all its duties under this contract, Purchaser's right to operate is terminated and Purchaser shall not have the right to remedy the breach. This provision shall not relieve Purchaser of any payment obligations.
- c. The State has the right to remedy the breach in the absence of any indicated attempt by Purchaser or if Purchaser is unable, as determined by the State, to remedy the breach. Any expense incurred by the State shall be charged to Purchaser and shall be paid within 30 days of receipt of billing.
- d. If Purchaser's violation is a result of a failure to make a payment when due, in addition to a. and b. above, interest shall accrue on the unpaid balance at 12 percent per annum, beginning the date payment was due.

G-220 State Suspends Operations

The Contract Administrator may suspend any operation of Purchaser under this contract when the State is suffering, or there is a reasonable expectation the State will suffer environmental, monetary, or other damage if the operation is allowed to continue.

Purchaser shall be in breach of this contract if the operation continues after the suspension notice or if the operation resumes without prior approval and notice from the Contract Administrator.

Purchaser may request a modification of a suspension within 30 days of the start of suspension through the dispute resolution process in clause G-240. If this process results in a finding that the suspension exceeded the time reasonably necessary to stop or prevent damage to the State, Purchaser is entitled to request a contract term adjustment under clause G-040.

If it reasonably appears that the damage that the State is suffering, or can reasonably be expected to suffer if the operation is allowed to continue, will prevent harvest for a period that will exceed 6 months, and Purchaser has complied with this contract, the provisions of clause G-066 shall govern just as if the harvest was prevented by an applicable foreign or domestic governmental regulation or order.

G-230 Unauthorized Activity

Any cutting, removal, or damage of forest products by Purchaser, its employees, agents, or invitees, including independent contractors, in a manner inconsistent with the terms of this contract or State law, is unauthorized. Such activity may subject Purchaser to liability for triple the value of said forest products under RCW 79.02.320 or RCW 79.02.300 and may result in prosecution under RCW 79.02.330 or other applicable statutes.

G-240 Dispute Resolution

The following procedures apply in the event of a dispute regarding interpretation or administration of this contract and the parties agree that these procedures must be followed before a lawsuit can be initiated.

- a. In the event of a dispute, Purchaser must make a written request to the Region Manager for resolution prior to seeking other relief.
- b. The Region Manager will issue a written decision on Purchaser's request within ten business days.
- c. Within ten business days of receipt of the Region Manager's decision, Purchaser may make a written request for resolution to the Deputy Supervisor - Uplands of the Department of Natural Resources.
- d. Unless otherwise agreed, a conference will be held by the Deputy Supervisor - Uplands within 30 calendar days of the receipt of Purchaser's request for review of the Region Manager's written decision. Purchaser and the Region Manager will have an opportunity to present their positions. The Deputy Supervisor - Uplands will issue a decision within a reasonable time of being presented with both Parties' positions.

G-250 Compliance with All Laws

Purchaser shall comply with all applicable statutes, regulations and laws, including, but not limited to; chapter 27.53 RCW, chapter 68.50 RCW, WAC 240-15 and WAC 296-54. Failure to comply may result in forfeiture of this contract.

G-260 Venue

This contract shall be governed by the laws of the State of Washington. In the event of a lawsuit involving this contract, venue shall be proper only in Thurston County Superior Court.

G-270 Equipment Left on State Land

All equipment owned or in the possession of Purchaser, its employees, agents, or invitees, including independent contractors, shall be removed from the sale area and other State land by the termination date of this contract. Equipment remaining unclaimed on State land 60 days after the expiration of the contract period is subject to disposition as provided by law. Purchaser shall pay to the State all costs of moving, storing, and disposing of such equipment. The State shall not be responsible for any damages to or loss of the equipment or damage caused by the moving, storing or disposal of the equipment.

G-280 Operating Release

An operating release is a written document, signed by the State and Purchaser, indicating that Purchaser has been relieved of certain rights or responsibilities with regard to the entire or a portion of the timber sales contract. Purchaser and State may agree to an operating release for this sale, or portion of this sale, prior to the contract expiration, when all contract requirements pertaining to the release area have been satisfactorily completed. Upon issuance of a release, Purchaser's right to cut and remove forest products on the released area will terminate.

G-310 Road Use Authorization

Purchaser is authorized to use the following State roads and roads for which the State has acquired easements and road use permits; B-LINE STA 543+00 to 685+10, B-6000, B-6008, B-7000, B-7200, B-7200Ext, B-7210, B-7212, KC-LINE, KC-0100, KC-0120, KC-0123, KC-0127, KC-0128, and SR8-1. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

G-330 Pre-work Conference

Purchaser shall arrange with the Contract Administrator to review this contract and to examine the sale area before beginning any operations. A plan of operations shall be developed and agreed upon by the Contract Administrator and Purchaser before beginning any operations. To the extent that the plan of operations is inconsistent with the contract, the terms of the contract shall prevail. State's acceptance and approval of Purchaser's plan of operations shall not be construed as any statement or warranty that the plan of operations is adequate for Purchaser's purposes or complies with applicable laws.

G-340 Preservation of Markers

Any legal land subdivision survey corners and witness objects are to be preserved. If such are destroyed or disturbed, the Purchaser shall, at the Purchaser's own expense, re-establish them through a licensed land surveyor in accordance with U.S. General Land Office standards. Corners and/or witness objects that must be disturbed or destroyed in the process of road construction or logging shall be adequately referenced and/or replaced in accordance with RCW 58.24.040(8). Such references must be approved by the Contract Administrator prior to removal of said corners and/or witness objects.

G-360 Road Use Reservation

The State shall have the right to use, without charge, all existing roads and any road constructed or reconstructed on State lands by Purchaser under this contract. The State may extend such rights to others. If the State grants such rights to others, the State shall require performance or payment, as directed by the State, for their proportionate share of maintenance based on their use.

G-370 Blocking Roads

Purchaser shall not block the B-LINE, KC-LINE, and B-7000 roads, unless authority is granted in writing by the Contract Administrator.

G-380 Road Easement and Road Use Permit Requirements

Purchaser agrees to comply with the terms and conditions of the attached:

Easement #55-000215 entered into between the State of Washington Department of Natural Resources and Al and Lois A. Parks, dated August 9, 1967.

G-390 Road Approach Permit Requirements

Purchaser agrees to comply with the attached terms and conditions of the road approach permit entered into between the State and the Washington State Department of Transportation.

G-396 Public Hauling Permit

The hauling of forest products, rock or equipment may require a state, county, or city hauling permit. Purchaser is responsible for obtaining any necessary permit and any costs associated with extra maintenance or repair levied by the permitting agency. Purchaser must provide the Contract Administrator with a copy of the executed permit.

G-430 Open Fires

Purchaser shall not set, or allow to be set by Purchaser's employees, agents, invitees and independent contractors, any open fire at any time of the year without first obtaining permission, in writing, from the Contract Administrator.

G-450 Encumbrances

This contract and Purchaser's activities are subject to the following:

Easement, including the terms and provisions thereof,

For: State Road

In Favor of: Washington State Department of Transportation

Disclosed by Application No.: 50-005480

Granted: 4/24/1959

Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Road
In Favor of: Northwest Pipeline Corporation
Disclosed by Application No.: 50-028843
Granted: 8/15/1963
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Road
In Favor of: Northwest Pipeline Corporation
Disclosed by Application No.: 50-028844
Granted: 8/15/1963
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Road
In Favor of: Northwest Pipeline Corporation
Disclosed by Application No.: 50-028845
Granted: 8/15/1963
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Road
In Favor of: Northwest Pipeline Corporation
Disclosed by Application No.: 50-028846
Granted: 8/15/1963
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Road
In Favor of: Northwest Pipeline Corporation
Disclosed by Application No.: 50-028847
Granted: 8/15/1963
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Road
In Favor of: Northwest Pipeline Corporation
Disclosed by Application No.: 50-028848
Granted: 8/15/1963
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Road
In Favor of: Northwest Pipeline Corporation
Disclosed by Application No.: 50-028849
Granted: 8/15/1963
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Trail
In Favor of: DNR
Disclosed by Application No.: 50-070357
Granted: 4/13/1998
Expires: 1/31/2047

Easement, including the terms and provisions thereof,
For: Land Use License
In Favor of: Washington Department of Fish & Wildlife
Disclosed by Application No.: 60-095576
Granted: 5/2/2017
Expires: 6/30/2022

Region Encumbrances

Lease, including the terms and provisions thereof,
For: Minor Forest Products
In Favor of: DNR- South Puget Sound Region
Disclosed by Application No.: 35-SPSC01
Granted: 1/1/2015
Expires: Indefinite

Special Notations

Located within the Medicine Creek Treaty area. Intergovernmental agreements for vehicle access with Squaxin Island Tribe (92-095269), Puyallup Tribe (92-095272), Muckleshoot Tribe (92-095267), and Nisqually Indian Tribe (92-097198).

Section P: Payments and Securities

P-011 Initial Deposit

Purchaser paid DATA MISSING initial deposit, which will be maintained pursuant to RCW 79.15.100(3). If the operating authority on this contract expires without Purchaser's payment of the full amount specified in Clause P-020, the initial deposit will be immediately forfeited to the State, and will be offset against Purchaser's remaining balance due. Any excess initial deposit funds not needed to ensure full payment of the contract price, or not needed to complete any remaining obligations of the Purchaser existing after contract expiration, will be refunded to the Purchaser.

P-020 Payment for Forest Products

Purchaser agrees to pay the total, lump sum contract price of \$159,900.00. The total contract price consists of a \$0.00 contract bid price plus \$159,900.00 in fees. Fees collected shall be retained by the state unless the contract is adjusted via the G-066 clause. Purchaser shall be liable for the entire purchase price, and will not be entitled to any refunds or offsets unless expressly stated in this contract.

THE PURCHASE PRICE SHALL NOT BE AFFECTED BY ANY FACTORS, INCLUDING: the amount of forest products actually present within the contract area, the actual acreage covered by the contract area, the amount or volume of forest products actually cut or removed by purchaser, whether it becomes physically impossible or uneconomic to remove the forest products, and whether the subject forest products have been lost or damaged by fire or any other cause. The only situations Purchaser may not be liable for the full purchase price are governed by clause G-066, concerning governmental regulatory actions taken during the term of the contract.

P-045 Guarantee of Payment

Purchaser will pay for forest products prior to cutting or will guarantee payment by posting an approved payment security. The amount of cash or payment security shall be determined by the State and shall equal or exceed the value of the cutting proposed by Purchaser.

P-050 Billing Procedure

The State will compute and forward to Purchaser statements of charges provided for in the contract. Purchaser shall deliver payment to the State on or before the date shown on the billing statement.

P-080 Payment Account Refund

Advance payments made under P-045 or P-045.2 remaining on account above the value for the charges shall be returned to Purchaser within 30 days following the final report of charges. Refunds not made within the 30 day period will accrue interest at the interest rate, as established by WAC 332-100-030, computed on a daily basis until paid.

P-090 Performance Security

Purchaser agrees to furnish, within 30 days of the confirmation date, security acceptable to the State in the amount of \$100,000.00. The Security provided shall guarantee performance of all provisions of this contract and payment of any damages caused by operations under this contract or resulting from Purchaser's noncompliance with any rule or law. Acceptable performance security may be in the form of a performance bond, irrevocable letter of credit, cash, savings or certificate of deposit account assignments, and must name the State as the obligee or beneficiary. A letter of credit must comply with Title 62A RCW, Article 5. Performance security must remain in full force over the duration of the contract length. Surety bonds issued shall conform to the issuance and rating requirements in clause G-150. The State shall retain the performance security pursuant to RCW 79.15.100. Purchaser shall not operate unless the performance security has been accepted by the State. If at any time the State decides that the security document or amount has become unsatisfactory, Purchaser

agrees to suspend operations and, within 30 days of notification, to replace the security with one acceptable to the State or to supplement the amount of the existing security.

P-100 Performance Security Reduction

The State may reduce the performance security after an operating release has been issued if the State determines that adequate security exists for any remaining obligations of Purchaser.

Section H: Harvesting Operations

H-013 Reserve Tree Damage Definition

Reserve trees are trees required and designated for retention within the sale boundary. Purchaser shall protect reserve trees from being cut, damaged, or removed during operations.

Reserve tree damage exists when one or more of the following criteria occur as a result of Purchaser's operation, as determined by the Contract Administrator:

- a. A reserve tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 144 square inches.
- b. A reserve tree top is broken or the live crown ratio is reduced below 30 percent.
- c. A reserve tree has more than 1/3 of the circumference of its root system injured such that the cambium layer is exposed.

If the Contract Administrator determines that a reserve tree has been cut or damaged, the Purchaser shall provide a replacement reserve tree of like condition, size, and species within the sale unit containing the damaged leave tree, as approved by the Contract Administrator. Purchaser may be required to pay liquidated damages for Excessive Reserve Tree Damage as detailed in clause D-041.

Removal of designated reserve trees from the sale area is unauthorized, and may invoke the use of the G-230 'Unauthorized Activity' clause. Purchaser is required to leave all cut or damaged reserve trees on site.

H-017 Preventing Excessive Soil Disturbance

Operations may be suspended when soil rutting exceeds 12 inches as measured from the natural ground line. To reduce soil damage, the Contract Administrator may require water bars to be constructed, grass seed to be placed on exposed soils, or other mitigation measures. Suspended operations shall not resume unless approval to do so has been given, in writing, by the Contract Administrator.

H-035 Fall Trees Into Sale Area

Trees shall be felled into the sale area unless otherwise approved by the Contract Administrator.

H-040 Purchaser Harvest Plan

Purchaser shall, as part of the plan of operations, prepare an acceptable harvest plan for all harvest units. The plan shall address the harvest operations, including tailhold and cable corridor locations, logging debris and safety, landing locations if different from map, and recreation trails, which are part(s) of this contract. The harvest plan shall be approved by the Contract Administrator prior to beginning the harvest operation. Purchaser shall not deviate from the harvest plan without prior written approval by the Contract Administrator.

H-051 Branding and Painting

Purchaser shall provide a State of Washington registered log brand, acceptable to the State, unless the State agrees to furnish the brand. All purchased timber shall be branded in a manner that meets the requirements of WAC 240-15-030(2)(a)(i). All timber purchased under a contract designated as export restricted shall also be painted in a manner that meets the requirements of WAC 240-15-030(2)(a)(ii).

For pulp loads purchased under a contract designated as export restricted, Purchaser shall brand at least 3 logs with legible brands at one end. Also, 10 logs shall be painted at one end with durable red paint.

H-080 Snags Not to be Felled

Snags not required to be felled for safety reasons may be left standing. Snags felled for safety reasons shall not be removed and must remain where felled.

H-120 Harvesting Equipment

Forest products sold under this contract shall be harvested and removed using cable, cable-tethered, and tracked ground based equipment. Cable and cable-tethered equipment allowed on all slopes. Ground based equipment is limited to tracked equipment, with non-tethered self-leveling equipment limited to sustained slopes of 55 percent or less, all other tracked equipment limited to sustained slopes that are 45 percent or less. Rubber tired skidders not allowed, except 6-wheeled rubber tired skidders with over-the-tire tracks spanning both sets of rear tires are allowed on sustained slopes that are 45 percent or less. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

H-125 Log Suspension Requirements

Lead-end suspension is required for all yarding activities.

H-126 Tailholds on State Land

If Purchaser tailholds on State land, methods to minimize damage to live trees outside the sale area shall be employed and must be approved in writing by the Contract Administrator.

H-130 Hauling Schedule

The hauling of forest products will not be permitted from November 1 to April 30, nor on weekends or State recognized holidays, unless authorized in writing by the Contract Administrator.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

- a. Equipment limitation zones are required within 30 feet of Type 5 streams.
- b. Crossings of Type 5 streams may be allowed at locations approved in writing by the Contract Administrator. Purchaser shall place a culvert or log puncheon at crossing locations (when water is present) to protect the stream bank and prevent sedimentation. All materials placed in and/or over the stream at these crossings shall be removed immediately upon completion of yarding on that skid trail.
- c. Any and all operations associated with this sale may be temporarily suspended when, in the opinion of the Contract Administrator, there is the potential for delivery to typed water.
- d. No equipment shall operate, or trees felled or damaged, outside the timber sale boundary.
- e. To facilitate proper reforestation, Purchaser shall, in concurrence with ground based yarding, clear plantable spots at a 11.5 foot by 11.5 foot spacing.
- f. The Purchaser shall notify all employees and contractors working on this sale that any danger tree marked or unmarked may be felled. Any marked danger tree will be replaced with a suitable tree of similar size and species as approved by the Contract Administrator.
- g. Purchaser shall take measures throughout operations to control soil erosion, water channelization, and prevent sediment delivery to streams or wetlands. Methods may include construction of water bars, "sweeping" with logs, silt traps, or other measures on skid trails, yarding corridors and haul roads.

Permission to do otherwise must be granted in writing by the Contract Administrator.

H-141 Additional Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

- a. Purchaser shall leave 2 down logs per acre. A log is defined as having a minimum diameter of 12 inches on the small end of the log and a minimum length of 20 feet or at least 100 board feet.

b. Tailhold locations outside the timber sale boundary are restricted due to protection of potentially unstable slopes. Locations where trees shall not be used as tailholds due to potentially unstable slopes are identified as Tailhold Restriction Areas on the attached Timber Sale Map and Logging Plan Map. Tailhold locations must be identified in a harvest plan by the Purchaser and approved by the Contract Administrator prior to operations.

Permission to do otherwise must be granted in writing by the State.

H-190 Completion of Settings

Operations begun on any setting of the sale area shall be completed before any operation begins on subsequent settings unless authorized in writing by the Contract Administrator.

H-220 Protection of Residual or Adjacent Trees

Unless otherwise specified by this contract, the Contract Administrator shall identify damaged adjacent or leave trees that shall be paid for according to clause G-230.

H-230 Tops and Limbs Outside the Sale Boundary

Tops and limbs outside the sale boundary as a result of Purchaser's operation shall be removed concurrently with the yarding operation unless otherwise directed by the Contract Administrator.

H-250 Additional Falling Requirements

Within the harvest units, all hardwood stems 2 inches DBH or greater, or 6 feet tall or greater, shall be felled. Remaining stump shall be no more than 12 inches in height. Areas of young or immature timber may be excluded from this requirement by the Contract Administrator.

Section C: Construction and Maintenance

C-040 Road Plan

Road construction and associated work provisions of the Road Plan for this sale, dated 5/1/2021 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on the B-7200ext, B-7210, B-7212, B-6008, KC-0123, KC-0127, KC-0128, SR8-1, and portions of the B-7000 that are directly adjacent to harvest units. All work shall be completed to the specifications detailed in the Road Plan.

C-060 Designated Road Maintainer

If required by the State, Purchaser shall perform maintenance and replacement work as directed by the Contract Administrator on all other roads used not covered in clause C-050. Purchaser shall furnish a statement in a form satisfactory to the State showing the costs incurred while performing this work. Costs shall be based on the rates set forth in the equipment rate schedule on file at the Region office or Engineering Division in

Olympia. The State shall reimburse Purchaser for said costs within 30 days of receipt and approval of the statement.

C-080 Landing Locations Approved Prior to Construction

Landings shall be marked by Purchaser and approved by the Contract Administrator prior to construction.

C-130 Dust Abatement

Purchaser shall abate dust on the B-Line from stations 638+35 to 647+00.

Section S: Site Preparation and Protection

S-001 Emergency Response Plan

An Emergency Response Plan (ERP) shall be provided to the Contract Administrator containing but not limited to, valid contact numbers and procedures for medical emergencies, fire, hazardous spills, forest practice violations and any unauthorized or unlawful activity on or in the vicinity of the sale area. The Contract Administrator and the State shall be promptly notified whenever an incident occurs requiring an emergency response.

The ERP must be presented for inspection at the prework meeting and kept readily available to all personnel, including subcontractors, on site during active operations.

S-010 Fire Hazardous Conditions

Purchaser acknowledges that operations under this Contract may increase the risk of fire. Purchaser shall conduct all operations under this agreement following the requirements of WAC 332-24-005 and WAC 332-24-405 and further agrees to use the highest degree of care to prevent uncontrolled fires from starting.

In the event of an uncontrolled fire, Purchaser agrees to provide equipment and personnel working at the site to safely and effectively engage in first response fire suppression activity.

Purchaser's failure to effectively engage in fire-safe operations is considered a breach and may result in suspension of operations.

S-030 Landing Debris Clean Up

Landing debris shall be disposed of in a manner approved in writing by the Contract Administrator.

S-050 Cessation of Operations for Low Humidity

When the humidity is 30 percent or lower on the sale area, all operations must cease unless authority to continue is granted by the State in writing.

S-060 Pump Truck or Pump Trailer

Purchaser shall provide a fully functional pump truck or pump trailer equipped to meet the specifications of WAC 332-24-005 and WAC 332-24-405 during the "closed

season" or as extended by the State and shall provide trained personnel to operate this equipment on the sale area during all operating periods.

S-100 Stream Cleanout

Slash or debris which enters Type 5 streams as a result of operations under this contract and which is identified by the Contract Administrator shall be removed and deposited in a stable position. Removal of slash or debris shall be accomplished in a manner that avoids damage to the natural stream bed and bank vegetation.

S-110 Resource Protection

No yarding equipment may operate within Riparian or Wetland Management Zones unless authority is granted in writing by the Contract Administrator.

S-120 Stream Protection

No timber shall be felled into, across, or yarded through Type 3 or 4 streams, with the exception of Right of Way Units #6 and #8 at the stream crossings.

S-130 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

Purchaser is responsible for understanding and complying with all applicable local, state, and federal hazardous material/waste laws and regulations for operations conducted under this contract. Such regulations pertain to, but may not be limited to, hazardous material storage, handling and transport, personnel protection, release notification and emergency response, cleanup, and waste disposal.

Purchaser shall be responsible for restoring the site in the event of a spill or other releases of hazardous material/waste during operations conducted under this contract.

b. Hazardous Materials Spill Prevention

All operations shall be conducted in a manner that avoids the release of hazardous materials, including petroleum products, into the environment (water, air or land).

c. Hazardous Materials Spill Containment, Control and Cleanup

If safe to do so, Purchaser shall take immediate action to contain and control all hazardous material spills. Purchaser shall ensure that enough quick response spill kits capable of absorbing 10 gallons of oil, coolant, solvent or contaminated water are available on site to quickly address potential spills from any piece of equipment at all times throughout active operations. If large quantities of bulk fuel/other hazardous materials are stored on site, Purchaser must be able to effectively control a container leak and contain &

recover a hazmat spill equal to the largest single on site storage container volume. (HAZWOPER reg. 29CFR 1910.120 (j) (1) (vii)).

d. Hazardous Material Release Reporting

Releases of oil or hazardous materials to the environment must be reported according to the State Department of Ecology (ECY). It is the responsibility of the Purchaser to have all emergency contact information readily available and a means of remote communication for purposes of quick notification. In the event of a spill covered in part a., the Purchaser is responsible for immediately notifying all the following:

- Department of Emergency Management (contact information below).
- National Response Center (contact information below).
- Appropriate Department of Ecology (ECY) regional office (contact information below).
- DNR Contract Administrator

ECY - Northwest Region: 1-425-649-7000
(Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom counties)

ECY - Southwest Region: 1-360-407-6300
(Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, and Wahkiakum counties)

ECY - Central Region: 1-509-575-2490
(Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, and Yakima counties)

ECY - Eastern Region: 1-509-329-3400
(Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman counties)

Department of Emergency Management 24-hour Number: 1-800-258-5990

National Response Center: 1-800-424-8802

S-131 Refuse Disposal

As required by RCW 70.93, All Purchaser generated refuse shall be removed from state lands for proper disposal prior to termination of this contract. No refuse shall be burned, buried or abandoned on state forest lands. All refuse shall be transported in a manner such that it is in compliance with RCW 70.93 and all loads or loose materials shall be covered/secured such that these waste materials are properly contained during transport.

Section D: Damages

D-013 Liquidated Damages or Failure to Perform

The following clauses provide for payments by Purchaser to the State for breaches of the terms of this contract other than failure to perform. These payments are agreed to as liquidated damages and not as penalties. They are reasonable estimates of anticipated harm to the State, which will be caused by Purchaser's breach. These liquidated damages provisions are agreed to by the State and Purchaser with the understanding of the difficulty of proving loss and the inconvenience or infeasibility of obtaining an adequate remedy. These liquidated damages provisions provide greater certainty for the Purchaser by allowing the Purchaser to better assess its responsibilities under the contract.

Clause P-020 governs Purchaser's liability in the event Purchaser fails to perform any of the contract requirements other than the below liquidated damage clauses without written approval by the State. Purchaser's failure to pay for all or part of the forest products sold in this contract prior to expiration of the contract term results in substantial injury to the State. Therefore, Purchaser agrees to pay the State the full lump sum contract price in P-020 in the event of failure to perform.

D-041 Reserve Tree Excessive Damage

When Purchaser's operations exceed the damage limits set forth in clause H-013, Reserve Tree Damage Definition, and when the Contract Administrator determines that a suitable replacement for a damaged reserve tree is not possible, the damaged trees result in substantial injury to the State. The value of the damaged reserve trees at the time of the breach is not readily ascertainable. Therefore, the Purchaser agrees to pay the State as liquidated damages at the rate of \$1,000.00 per tree for all damaged reserve trees that are not replaced in all units.

SIGNATURES

This agreement may be executed in any number of counterparts (including by electronic mail in portable document format (.pdf), or by facsimile) each of which shall be deemed an original but all of which, when taken together, shall constitute one and the same Agreement binding on all parties.

IN WITNESS WHEREOF, the Parties hereto have entered into this contract.

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Purchaser

Print Name

Date: _____

Address: _____

Scott Sargent

South Puget Sound Region Manager

Date: _____

DRAFT

DRAFT

DRAFT

CORPORATE ACKNOWLEDGEMENT
(Required for both LLC and Inc. Entities)

STATE OF _____)

COUNTY OF _____)

On this _____ day of _____, 20____, before me personally
appeared _____

_____ to me known to be the
_____ of the corporation
that executed the within and foregoing instrument and acknowledged said instrument to be the
free and voluntary act and deed of the corporation, for the uses and purposes therein mentioned,
and on oath stated that (he/she was) (they were) authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and
year first above written.

Notary Public in and for the State of

My appointment expires _____

Schedule A
Recreation Trail Clean Out and Repair

This schedule applies to the Loki Trail located in Units #2-#5.

Purchaser is responsible for closing trails with orange construction barricade netting and posting trail closure signs provided by DNR, at designated locations provided by the Contract Administration (CA). Purchaser is responsible for giving five (5) calendar days notice before closing the trail.

Purchaser is responsible for locating and marking the recreation trail within the sale boundary on the ground prior to harvest as approved by the CA.

- If needed upon completion of harvest activities, Purchaser shall locate the original recreation trail with pink fluorescent flagging. The CA will then approve the trail location in writing and repair/clean out can begin.

Recreation trail repair/clean out shall occur within 2 weeks of completion of harvest activity within 200 feet of the trail and shall consist of the following:

- Remove all logging debris from the recreation trail and the area on each side of the trail within 5 feet of the travel path.
- Trail will be repaired where holes or ruts resulted due to logging damage. The trail will be returned to its original width on mineral soils and free of organic debris.
- Existing drainage control measures shall be returned to pre-harvest condition.

All work described above shall be done as determined by the CA. The logging release for the unit will not be issued until repair and clean out is completed and approved in writing by the CA.

Schedule B
Cable Corridor Requirements for Unit #3

- A. Location of cable yarding corridors must be marked by Purchaser and approved by the Contract Administrator prior to use. No cutting of corridors may begin until a Sale Area Adjustment is executed to include the approved corridor locations in the Sale Area per clause G-091.
- B. Cable corridor shall not exceed 12 feet in width, including rub trees.
- C. Excessive soil damage is not permitted within corridors. Excessive soil damage is described in clause H-017.
- D. Corridors shall be located in a manner to minimize removal of trees.
- E. Corridors shall be water barred at the time of completion of yarding, if required by the Contract Administrator.
- F. Once a cable yarding corridor is closed, Purchaser may not reopen that cable yarding corridor unless approved in writing by the Contract administrator.

Purchaser shall not deviate from the requirements set forth in this schedule without prior written approval by the Contract Administrator.



WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOREST EXCISE TAX ROAD SUMMARY SHEET

Region: South Puget Sound

Timber Sale Name: Crush Timber Sale

Application Number: 30- 100998

EXCISE TAX APPLICABLE ACTIVITIES

Construction: 1,110 linear feet
Road to be constructed (optional and required) but not abandoned

Reconstruction: 878 linear feet
Road to be reconstructed (optional and required) but not abandoned

Abandonment: 0 linear feet
Abandonment of existing roads not reconstructed under the contract

Decommission: 0 linear feet
Road to be made undriveable but not officially abandoned.

Pre-Haul Maintenance: 70216 linear feet
Existing road to receive maintenance work (optional and required) prior to haul

EXCISE TAX EXEMPT ACTIVITIES

Temporary Construction: 2949 linear feet
Roads to be constructed (optional and required) and then abandoned

0 linear feet

Temporary Reconstruction:
Roads to be reconstructed (optional and required) and then abandoned

All parties must make their own assessment of the taxable or non-taxable status of any work performed under the timber sale contract. The Department of Revenue bears responsibility for determining forest road excise taxes. The Department of Natural Resources developed this form to help estimate the impact of forest excise taxes. However, the information provided may not precisely calculate the actual amount of taxes due. The Department of Revenue is available for consultation by calling 1.800.548.8829.

(Revised 9/18)

PRE-CRUISE NARRATIVE

Sale Name: Crush	Region: South Puget Sound
Agreement #: 30-100998	District: Black Hills
Contact Forester: Sam Lake	Phone/ Location: Cell: (360)-628-3868
Alternate Contact: Dee Dee Korsikas-Fogg	Phone/ Location: Cell: (425)-681-0448

Type of Sale (lump sum, mbf scale, tonnage scale or contract harvest): **Lump Sum**

Required or Optional removal of utility as pulp (*for scale sales only*):

Evaluated for RFRS Implementation?: NO

Percentage cable-uphill: 33%

Percentage cable-downhill:

Percentage ground based: 67%

Species Onsite: ☒ RC, ☒ DF, ☒ WH, ☒ RA, ☐ BC, ☒ BLM, ☐ NF, ☐ SF, ☒ SS, ☐ Other: (Please List)

UNIT ACREAGES* AND METHOD OF DETERMINATION:

Unit #	Harvest R/W or RMZ WMZ	Legal Description Sec/Twp/Rng	Grant	Gross Traversed Acres	Deductions from Gross Acres (No harvest acres)				Net Harvest Acres	Acreage Determination (List method, dimensions and error of closure if applicable)
					RMZ/ WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (describe)		
1		Sec 24, 13 / T 18 N/ R 04 W		89	0	4.0	.8		84.2	Trimble R1 GPS. Road acreage(LXW) 1260 x 30
2		Sec 23 / T 18N/ R 04 W		7.2	0	.2	0		7	Trimble R1 GPS
3		Sec 23/ T 18N/ R 04 W		7.4	0	.3	0		7.1	Trimble R1 GPS
4		Sec 23/ T 18N/ R 04 W		20.6	0	1.3	0		19.3	Trimble R1 GPS
5		Sec 23/ T 18N/ R 04 W		22	0	1.3	0		20.7	Trimble R1 GPS
R/W 6		Sec 23/ T 18N/ R04 W		.4	0	0	0		.4	Trimble R1 GPS
R/W 7		Sec 23 / T 18 N/ R 04 W		.8	0	0	0		.8	Trimble R1 GPS
R/W 8		Sec 23/ T 18N/ R 04 W		.8	0	0	0		.8	Trimble R1 GPS
TOTAL ACRES				148.2		7.1	.8		140.3	

HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Mark leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.) *For all marked thinnings, include a tree count by species.
1	Variable Retention Harvest: Boundaries are marked with white "Timber Sale Boundary" tags and pink flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags and pink flagging.	N/A	8 leave trees per acre

2	Variable Retention Harvest: Boundaries are marked with white "Timber Sale Boundary" tags and pink flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags and pink flagging.	N/A	8 leave trees per acre
3	Variable Retention Harvest: Boundaries are marked with white "Timber Sale Boundary" tags and pink flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags and pink flagging.	N/A	8 leave trees per acre
4	Variable Retention Harvest: Boundaries are marked with white "Timber Sale Boundary" tags and pink flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags and pink flagging.	N/A	8 leave trees per acre
5	Variable Retention Harvest: Boundaries are marked with white "Timber Sale Boundary" tags and pink flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags and pink flagging.	N/A	8 leave trees per acre
6	Right of Way: Boundaries marked with orange "Right of Way" tags and orange flagging.	N/A	N/A
7	Right of Way: Boundaries marked with orange "Right of Way" tags and orange flagging.	N/A	9 Residual leave trees from Sleeper are marked with double blue bands to be left onsite.
8	Right of Way: Boundaries marked with orange "Right of Way" tags and orange flagging.	N/A	N/A

OTHER PRE-CRUISE INFORMATION:

Unit #	Estimated Volume	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	See Cruise		
2	See Cruise		
3	See Cruise		
4	See Cruise		
5	See Cruise		
6	See Cruise		
7	See Cruise		
8	See Cruise		

REMARKS:

This is a 5 unit VRH with 3 R/W units with 67% ground based and 33% cable based yarding. There are new construction roads in all units.

Prepared By: Sam Lake Date:	Title: Forester	CC:
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Revised 2/23/2007 (PSLD), Revised 1/22/20 (SPS)

Timber Sale Cruise Report Crush

Sale Name: CRUSH

Sale Type: LUMP SUM

Region: SO PUGET

District: BLACK HILLS

Lead Cruiser: Aaron Coleman

Other Cruisers:

Cruise Narrative:

This sale consists of 5 variable retention harvest (VRH) units, and 3 right-of-way (ROW) units located off B-7000, B-7200, and the KC-0120 roads in the Capitol State Forest. A 786 key is needed for KC-Line access, all roads are in good condition.

The primary species for this sale is as follows:

Douglas-fir (68%) with an average diameter of 27 inches.

Red alder (16%) with an average diameter of 15 inches.

Western hemlock (10%) with an average diameter of 14 inches.

Unit 1 contains the best mix of species. The alder is generally straight with minimal defect and the fir is large and true. Units 2-5 are mostly big DF with a smaller alder/hemlock component. The most commonly observed defect was broken/forked tops and spike knots. This is mostly shovel ground with generally favorable logging conditions.

** If Unit 3 is to be cable logged, additional removal volume will be needed to accommodate the corridors created in the reprod to the southwest of the unit. This reprod was cruised at 22,796 bf/acre. **

** FMA acres were used as cruise acres. Plots that fell within or next to leave tree clumps were sampled. Leave trees contribute to the overall statistics of the sale, but do not contribute to the overall sale volume. **

Timber Sale Notice Volume (MBF)

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	Spec Mill	2 Saw	3 Saw	4 Saw
DF	27.1	7.0		4,184	158	3,712	254	60
RA	15.2			991		300	275	417
WH	14.1	9.0		638		294	201	143
MA	19.2			187		137	3	47
RC	22.4			151			138	13
ALL	18.3	8.0		6,150	158	4,442	870	680

Timber Sale Notice Weight (tons)

Sp	Tons by Grade				
	All	Spec Mill	2 Saw	3 Saw	4 Saw
DF	23,994	909	20,543	2,065	478

Sp	Tons by Grade				
	All	Spec Mill	2 Saw	3 Saw	4 Saw
RA	8,147		2,236	2,140	3,771
WH	5,064		2,118	1,744	1,202
MA	1,632		1,045	33	554
RC	1,271			1,159	112
ALL	40,108	909	25,942	7,141	6,117

Timber Sale Overall Cruise Statistics (Cut + Leave Trees)

BA (sq ft/acre)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR SE (%)	Net Vol (bf/acre)	Vol SE (%)
237.3	4.1	191.2	2.9	45,815	4.9

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
CRUSH U1	B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	89.0	89.0	48	23	1
CRUSH U2	B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	7.2	7.2	7	3	0
CRUSH U3	B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	7.4	7.4	7	5	0
CRUSH U4	B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	20.6	20.6	15	9	0
CRUSH U5	B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	22.0	22.0	16	8	0
CRUSH U6	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.4	0.4	1	1	0
CRUSH U7	B1: VR, 1 BAF (33.61) Measure All, Sighting Ht = 4.5 ft	0.8	0.8	1	1	0
CRUSH U8	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.8	0.8	1	1	0
All		148.2	148.2	96	51	1

Timber Sale Log Grade x Sort Summary

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	20.2	36	23,141	22,407	3.1	18,382.5	3,320.8
DF	LIVE	2 SAW	HQ-B	17.5	37	2,666	2,640	1.0	2,159.9	391.2
DF	LIVE	3 SAW	Domestic	9.5	33	1,535	1,528	0.3	1,900.4	226.5
DF	LIVE	3 SAW	HQ-B	11.2	36	182	182	0.0	164.7	27.0
DF	LIVE	4 SAW	Domestic	5.2	30	408	408	0.0	478.2	60.5
DF	LIVE	CULL	Cull	21.6	3	69	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	20.1	38	1,063	1,063	0.0	908.5	157.5
MA	LIVE	2 SAW	Domestic	15.1	32	1,055	921	11.5	1,044.8	136.5
MA	LIVE	3 SAW	Domestic	10.2	32	24	21	12.2	33.1	3.1
MA	LIVE	4 SAW	Domestic	7.9	28	363	319	10.7	553.6	47.3
MA	LIVE	CULL	Cull	19.5	8	157	0	100.0	0.0	0.0
RA	LIVE	2 SAW	Domestic	13.4	31	2,159	2,024	6.3	2,236.3	299.9
RA	LIVE	3 SAW	Domestic	10.7	34	1,967	1,854	5.7	2,140.4	274.8
RA	LIVE	4 SAW	Domestic	7.1	29	2,943	2,810	4.5	3,770.6	416.5
RA	LIVE	CULL	Cull	10.7	2	30	0	100.0	0.0	0.0
RC	LIVE	3 SAW	Domestic	14.3	36	1,095	929	15.1	1,159.0	137.7
RC	LIVE	4 SAW	Domestic	5.6	28	89	88	1.0	112.3	13.1
RC	LIVE	CULL	Cull	37.5	12	42	0	100.0	0.0	0.0
WH	LIVE	2 SAW	Domestic	14.5	39	2,108	1,984	5.7	2,118.1	294.1
WH	LIVE	3 SAW	Domestic	8.3	40	1,364	1,354	0.6	1,743.6	200.7
WH	LIVE	4 SAW	Domestic	5.1	30	975	965	0.8	1,202.1	143.0
WH	LIVE	CULL	Cull	15.8	2	2	0	100.0	0.0	0.0

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Domestic	5.9	29	726	0.4	929.8	107.6
DF	9 - 11	LIVE	Domestic	10.5	31	1,162	0.2	1,389.2	172.2
DF	9 - 11	LIVE	HQ-B	11.4	36	182	0.0	164.7	27.0
DF	12 - 14	LIVE	Domestic	13.6	37	1,723	1.4	1,819.6	255.3
DF	12 - 14	LIVE	HQ-B	14.2	37	426	0.0	403.8	63.2
DF	15 - 19	LIVE	HQ-B	16.7	37	881	1.4	745.1	130.5
DF	15 - 19	LIVE	Domestic	17.7	36	5,636	2.5	4,693.5	835.2
DF	15 - 19	LIVE	Cull	18.1	3	0	100.0	0.0	0.0
DF	15 - 19	LIVE	HQ-A	18.2	39	592	0.0	521.9	87.7
DF	20+	LIVE	HQ-B	21.7	37	1,333	1.0	1,011.0	197.5
DF	20+	LIVE	Cull	23.6	3	0	100.0	0.0	0.0

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	20+	LIVE	Domestic	23.8	36	15,098	3.5	11,929.0	2,237.5
DF	20+	LIVE	HQ-A	24.1	36	471	0.0	386.7	69.8
MA	5 - 8	LIVE	Domestic	6.4	28	103	13.2	241.5	15.3
MA	9 - 11	LIVE	Domestic	9.4	29	179	5.9	276.4	26.5
MA	12 - 14	LIVE	Domestic	13.3	30	448	14.0	579.8	66.4
MA	12 - 14	LIVE	Cull	13.8	2	0	100.0	0.0	0.0
MA	15 - 19	LIVE	Domestic	16.8	35	452	10.3	464.7	67.0
MA	15 - 19	LIVE	Cull	17.3	9	0	100.0	0.0	0.0
MA	20+	LIVE	Domestic	22.0	20	79	10.0	69.2	11.7
MA	20+	LIVE	Cull	25.0	7	0	100.0	0.0	0.0
RA	5 - 8	LIVE	Domestic	6.6	27	1,811	4.6	2,431.0	268.4
RA	9 - 11	LIVE	Domestic	10.2	32	2,854	5.2	3,479.9	422.9
RA	9 - 11	LIVE	Cull	10.4	2	0	100.0	0.0	0.0
RA	12 - 14	LIVE	Cull	13.1	4	0	100.0	0.0	0.0
RA	12 - 14	LIVE	Domestic	13.3	31	1,827	6.4	2,059.1	270.7
RA	15 - 19	LIVE	Domestic	15.9	26	197	5.7	177.1	29.2
RA	15 - 19	LIVE	Cull	19.1	3	0	100.0	0.0	0.0
RC	5 - 8	LIVE	Domestic	6.0	30	132	1.2	185.9	19.6
RC	9 - 11	LIVE	Domestic	11.7	36	66	10.5	84.0	9.8
RC	12 - 14	LIVE	Domestic	13.2	36	236	9.4	286.7	35.0
RC	15 - 19	LIVE	Domestic	18.2	35	333	15.7	430.2	49.3
RC	20+	LIVE	Domestic	23.2	36	251	21.8	284.5	37.2
RC	20+	LIVE	Cull	37.5	12	0	100.0	0.0	0.0
WH	5 - 8	LIVE	Domestic	5.6	32	1,400	0.9	1,843.8	207.5
WH	9 - 11	LIVE	Domestic	10.5	39	918	0.3	1,101.9	136.1
WH	12 - 14	LIVE	Domestic	12.8	38	651	3.2	796.3	96.5
WH	15 - 19	LIVE	Cull	15.8	2	0	100.0	0.0	0.0
WH	15 - 19	LIVE	Domestic	17.0	39	952	2.6	920.6	141.0
WH	20+	LIVE	Domestic	22.1	40	381	16.1	401.1	56.5

Cruise Unit Report CRUSH U1

Unit Sale Notice Volume (MBF): CRUSH U1

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	Spec Mill	2 Saw	3 Saw	4 Saw
DF	23.8			1,899	158	1,583	112	46
RA	15.0			737		218	216	303
WH	11.9			192		60	88	44
MA	19.3			179		134		46
RC	22.4			147			135	13
ALL	17.3			3,154	158	1,996	550	451

Unit Cruise Design: CRUSH U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	89.0	89.0	48	23	1

Unit Cruise Summary: CRUSH U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	29	81	1.7	0
RA	43	101	2.1	0
WH	9	15	0.3	0
MA	14	38	0.8	0
RC	14	25	0.5	0
ALL	109	260	5.4	0

Unit Cruise Statistics (Cut + Leave Trees): CRUSH U1

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	91.9	95.6	13.8	268.8	24.5	4.5	24,690	98.7	14.5
RA	73.3	72.0	10.4	117.4	17.7	2.7	8,611	74.2	10.7
WH	17.0	188.5	27.2	135.6	30.1	10.0	2,307	190.9	29.0
MA	29.6	196.2	28.3	75.1	52.0	13.9	2,227	202.9	31.5
RC	17.5	213.2	30.8	102.7	20.6	5.5	1,797	214.2	31.3
ALL	229.4	40.4	5.8	172.8	48.0	4.6	39,632	62.8	7.4

Unit Summary: CRUSH U1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	29	ALL	23.8	84	108	21,656	21,337	1.5	25.7	79.4	16.3	1,899.0
MA	LIVE	CUT	14	ALL	19.3	37	85	2,565	2,016	21.4	13.2	26.8	6.1	179.5
RA	LIVE	CUT	43	ALL	15.0	66	88	8,741	8,282	5.2	57.5	70.5	18.2	737.1
RC	LIVE	CUT	14	ALL	22.4	66	78	2,000	1,653	17.3	5.9	16.1	3.4	147.1
WH	LIVE	CUT	9	ALL	11.9	58	70	2,166	2,153	0.6	20.6	15.9	4.6	191.6
ALL	LIVE	CUT	109	ALL	17.7	65	88	37,128	35,441	4.5	122.9	208.7	48.6	3,154.3
ALL	ALL	ALL	109	ALL	17.7	65	88	37,128	35,441	4.5	122.9	208.7	48.6	3,154.3

Cruise Unit Report CRUSH U2

Unit Sale Notice Volume (MBF): CRUSH U2

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	28.5			327	297	29	1
WH	23.1			118	95	20	3
MA	16.0			3		2	1
ALL	25.2			447	392	51	5

Unit Cruise Design: CRUSH U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	7.2	7.2	7	3	0

Unit Cruise Summary: CRUSH U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	11	24	3.4	0
WH	3	8	1.1	0
MA	2	2	0.3	0
ALL	16	34	4.9	0

Unit Cruise Statistics (Cut + Leave Trees): CRUSH U2

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	186.7	58.0	21.9	265.4	11.9	3.6	49,538	59.2	22.2
WH	62.2	128.1	48.4	262.5	23.3	13.5	16,332	130.2	50.3
MA	9.6	264.6	100.0	40.7	5.6	4.0	391	264.6	100.1
ALL	258.5	33.5	12.6	256.4	32.7	8.2	66,261	46.8	15.1

Unit Summary: CRUSH U2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	11	ALL	28.5	128	165	48,114	45,410	5.6	38.6	171.1	32.0	327.0
MA	LIVE	CUT	2	ALL	16.0	35	48	488	391	20.0	6.9	9.6	2.4	2.8

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	3	ALL	23.1	114	144	17,590	16,332	7.2	21.4	62.2	12.9	117.6
ALL	LIVE	CUT	16	ALL	25.8	114	146	66,192	62,133	6.1	66.9	242.9	47.3	447.4
ALL	ALL	ALL	16	ALL	25.8	114	146	66,192	62,133	6.1	66.9	242.9	47.3	447.4

Cruise Unit Report CRUSH U3

Unit Sale Notice Volume (MBF): CRUSH U3

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	31.6	7.0		371	351	17	3
WH	13.1	9.0		97	68	10	20
RA	15.2			12	3	5	5
MA	19.0			5	3	2	0
ALL	17.1	8.0		484	424	33	28

Unit Cruise Design: CRUSH U3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	7.4	7.4	7	5	0

Unit Cruise Summary: CRUSH U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	12	28	4.0	1
WH	11	13	1.9	1
RA	3	3	0.4	0
MA	1	1	0.1	0
ALL	27	45	6.4	2

Unit Cruise Statistics (Cut + Leave Trees): CRUSH U3

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	211.8	39.3	14.9	289.9	12.1	3.5	61,402	41.1	15.3
WH	92.2	100.5	38.0	158.4	39.8	12.0	14,602	108.1	39.8
RA	14.4	124.7	47.1	110.1	21.7	12.5	1,586	126.6	48.8
MA	4.8	264.6	100.0	130.5	0.0	0.0	627	264.6	100.0
ALL	323.2	26.2	9.9	242.0	35.9	6.9	78,216	44.5	12.1

Unit Summary: CRUSH U3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	12	ALL	31.6	131	169	51,862	50,129	3.3	31.8	172.9	30.8	371.0
MA	LIVE	CUT	1	ALL	19.0	78	98	697	627	10.1	2.4	4.8	1.1	4.6
RA	LIVE	CUT	3	ALL	15.2	65	85	1,720	1,586	7.8	11.4	14.4	3.7	11.7
WH	LIVE	CUT	11	ALL	13.1	58	71	13,235	13,081	1.2	88.2	82.6	22.8	96.8
ALL	LIVE	CUT	27	ALL	19.4	76	96	67,514	65,423	3.1	133.8	274.7	58.4	484.1
ALL	ALL	ALL	27	ALL	19.4	76	96	67,514	65,423	3.1	133.8	274.7	58.4	484.1

Cruise Unit Report CRUSH U4

Unit Sale Notice Volume (MBF): CRUSH U4

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	28.3			859	803	53	3
WH	10.4			105	46	23	36
RA	14.1			90	27	11	53
ALL	17.2			1,054	876	87	91

Unit Cruise Design: CRUSH U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	20.6	20.6	15	9	0

Unit Cruise Summary: CRUSH U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	27	45	3.0	0
WH	7	10	0.7	0
RA	7	15	1.0	0
ALL	41	70	4.7	0

Unit Cruise Statistics (Cut + Leave Trees): CRUSH U4

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	163.3	71.3	18.4	255.3	18.3	3.5	41,695	73.6	18.7
WH	36.3	135.0	34.8	140.4	39.1	14.8	5,094	140.5	37.9
RA	37.8	158.9	41.0	123.5	20.3	7.7	4,667	160.2	41.7
ALL	237.4	43.5	11.2	216.8	34.2	5.3	51,456	55.3	12.4

Unit Summary: CRUSH U4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	27	ALL	28.3	109	145	43,539	41,695	4.2	37.4	163.3	30.7	858.9
RA	LIVE	CUT	7	ALL	14.1	70	93	4,566	4,390	3.9	32.8	35.5	9.5	90.4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	7	ALL	10.4	49	63	5,449	5,094	6.5	61.5	36.3	11.3	104.9
ALL	LIVE	CUT	41	ALL	18.1	71	94	53,554	51,179	4.4	131.7	235.1	51.5	1,054.2
ALL	ALL	ALL	41	ALL	18.1	71	94	53,554	51,179	4.4	131.7	235.1	51.5	1,054.2

Cruise Unit Report CRUSH U5

Unit Sale Notice Volume (MBF): CRUSH U5

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	32.0			710	668	42	1
RA	16.9			138	46	41	51
WH	12.7			119	26	53	40
RC	22.0			4		3	1
ALL	20.6			971	740	139	92

Unit Cruise Design: CRUSH U5

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 33.61 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	22.0	22.0	16	8	0

Unit Cruise Summary: CRUSH U5

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	18	41	2.6	0
RA	13	27	1.7	0
WH	4	12	0.8	0
RC	1	2	0.1	0
ALL	36	82	5.1	0

Unit Cruise Statistics (Cut + Leave Trees): CRUSH U5

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	139.5	76.7	19.2	271.1	14.0	3.3	37,823	78.0	19.5
RA	56.7	111.8	28.0	119.4	12.8	3.6	6,773	112.6	28.2
WH	40.8	77.0	19.2	132.1	19.7	9.8	5,392	79.5	21.6
RC	4.2	273.3	68.3	80.3	0.0	0.0	337	273.3	68.3
ALL	241.3	37.5	9.4	208.6	39.4	6.6	50,325	54.4	11.5

Unit Summary: CRUSH U5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	18	ALL	32.0	123	158	33,417	32,288	3.4	21.3	119.1	21.1	710.3
RA	LIVE	CUT	13	ALL	16.9	80	95	6,911	6,271	9.3	33.7	52.5	12.8	138.0
RC	LIVE	CUT	1	ALL	22.0	72	91	169	169	0.0	0.8	2.1	0.4	3.7
WH	LIVE	CUT	4	ALL	12.7	62	77	5,522	5,392	2.3	46.4	40.8	11.5	118.6
ALL	LIVE	CUT	36	ALL	19.6	81	100	46,019	44,120	4.1	102.2	214.5	45.8	970.6
ALL	ALL	ALL	36	ALL	19.6	81	100	46,019	44,120	4.1	102.2	214.5	45.8	970.6

Cruise Unit Report CRUSH U6

Unit Sale Notice Volume (MBF): CRUSH U6

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	38.0			5	5		
WH	13.6			4		4	1
RA	15.0			2		2	1
ALL	15.8			11	5	5	1

Unit Cruise Design: CRUSH U6

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.4	0.4	1	1	0

Unit Cruise Summary: CRUSH U6

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	1	1	1.0	0
WH	2	2	2.0	0
RA	1	1	1.0	0
ALL	4	4	4.0	0

Unit Cruise Statistics (Cut + Leave Trees): CRUSH U6

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	40.0	0.0	0.0	284.0	0.0	0.0	11,362	0.0	0.0
WH	80.0	0.0	0.0	134.4	22.2	15.7	10,750	22.2	15.7
RA	40.0	0.0	0.0	124.7	0.0	0.0	4,987	0.0	0.0
ALL	160.0	0.0	0.0	169.4	46.3	23.2	27,099	46.3	23.2

Unit Summary: CRUSH U6

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	1	ALL	38.0	124	160	11,809	11,362	3.8	5.1	40.0	6.5	4.5
RA	LIVE	CUT	1	ALL	15.0	70	87	5,281	4,987	5.6	32.6	40.0	10.3	2.0

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	2	ALL	13.6	68	84	10,750	10,750	0.0	79.3	80.0	21.7	4.3
ALL	LIVE	CUT	4	ALL	15.8	71	88	27,840	27,099	2.7	117.0	160.0	38.5	10.8
ALL	ALL	ALL	4	ALL	15.8	71	88	27,840	27,099	2.7	117.0	160.0	38.5	10.8

Cruise Unit Report CRUSH U7

Unit Sale Notice Volume (MBF): CRUSH U7

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	8.3			13	6	1	7
ALL	8.3			13	6	1	7

Unit Cruise Design: CRUSH U7

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (33.61) Measure All, Sighting Ht = 4.5 ft	0.8	0.8	1	1	0

Unit Cruise Summary: CRUSH U7

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	4	4	4.0	0
ALL	4	4	4.0	0

Unit Cruise Statistics (Cut + Leave Trees): CRUSH U7

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	134.4	0.0	0.0	118.7	65.1	32.5	15,955	65.1	32.5
ALL	134.4	0.0	0.0	118.7	65.1	32.5	15,955	65.1	32.5

Unit Summary: CRUSH U7

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	4	ALL	8.3	40	48	15,955	15,955	0.0	357.8	134.4	46.7	12.8
ALL	LIVE	CUT	4	ALL	8.3	40	48	15,955	15,955	0.0	357.8	134.4	46.7	12.8
ALL	ALL	ALL	4	ALL	8.3	40	48	15,955	15,955	0.0	357.8	134.4	46.7	12.8

Cruise Unit Report CRUSH U8

Unit Sale Notice Volume (MBF): CRUSH U8

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
RA	16.1			12	6	2	5
WH	13.0			4		3	1
ALL	15.1			16	6	5	6

Unit Cruise Design: CRUSH U8

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.8	0.8	1	1	0

Unit Cruise Summary: CRUSH U8

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RA	3	3	3.0	0
WH	1	1	1.0	0
ALL	4	4	4.0	0

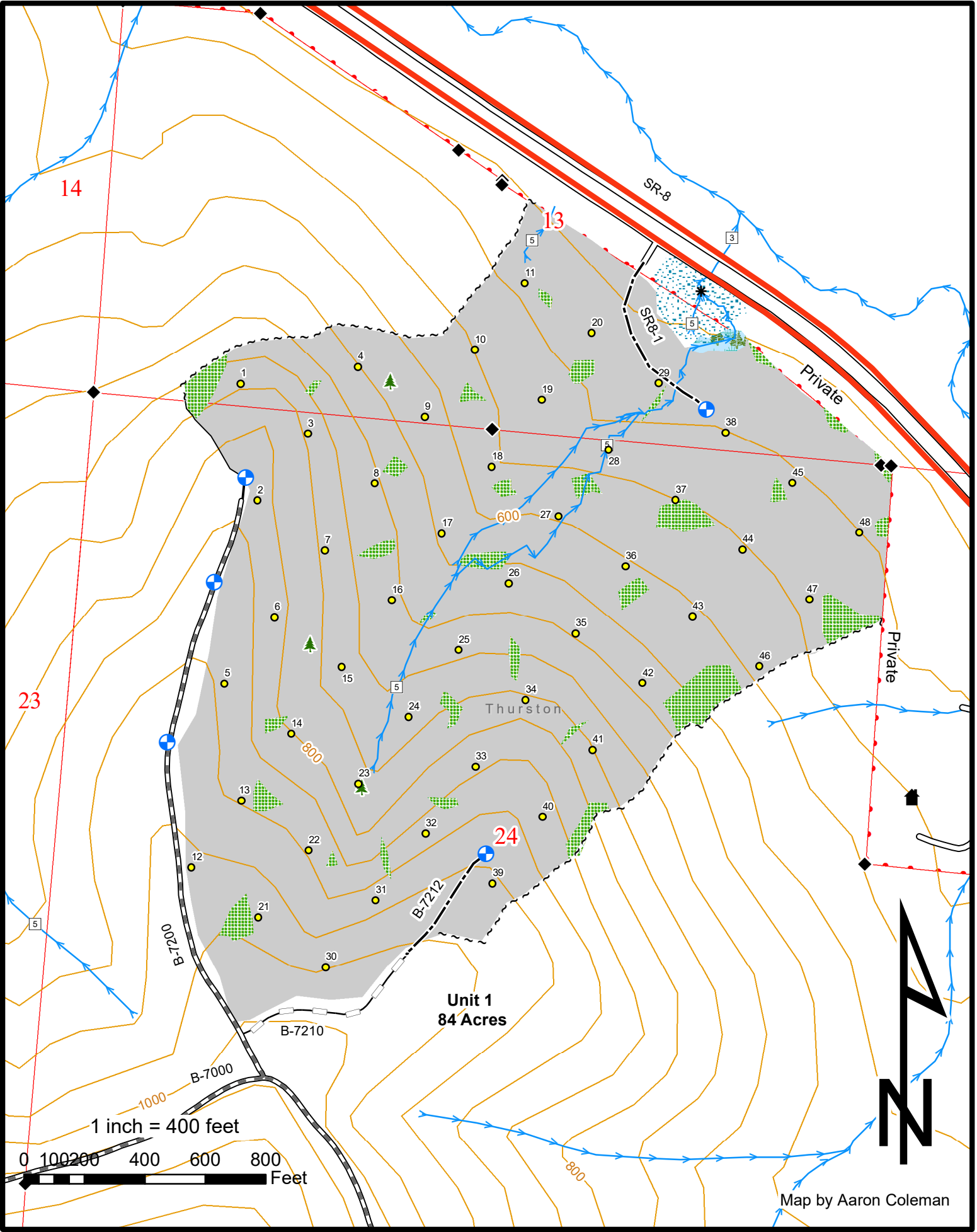
Unit Cruise Statistics (Cut + Leave Trees): CRUSH U8

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
RA	120.0	0.0	0.0	124.7	20.4	11.8	14,965	20.4	11.8
WH	40.0	0.0	0.0	121.5	0.0	0.0	4,860	0.0	0.0
ALL	160.0	0.0	0.0	123.9	16.8	8.4	19,825	16.8	8.4

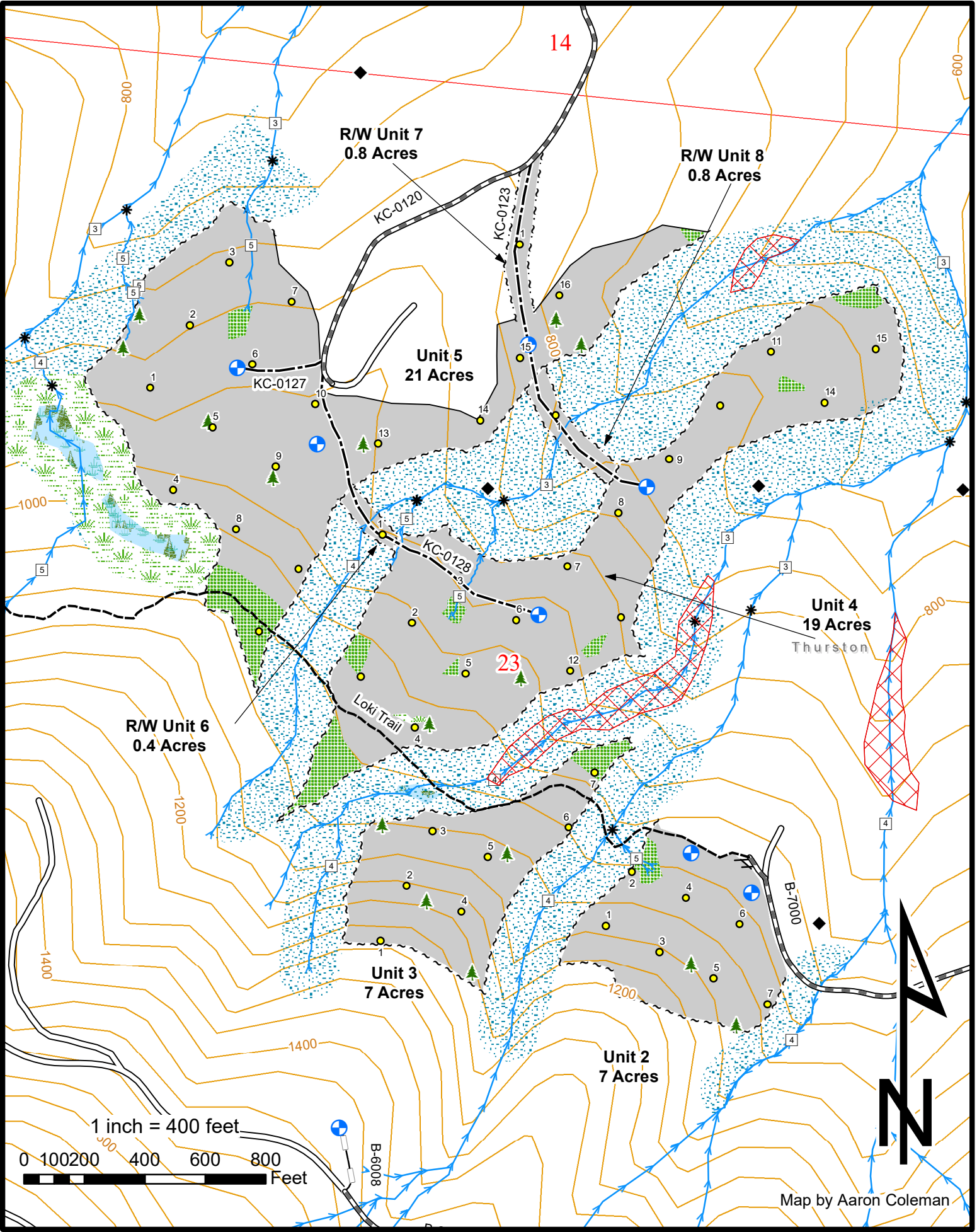
Unit Summary: CRUSH U8

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
RA	LIVE	CUT	3	ALL	16.1	71	88	16,567	14,965	9.7	84.9	120.0	29.9	12.0
WH	LIVE	CUT	1	ALL	13.0	64	83	4,860	4,860	0.0	43.4	40.0	11.1	3.9
ALL	LIVE	CUT	4	ALL	15.1	69	86	21,427	19,825	7.5	128.3	160.0	41.0	15.9
ALL	ALL	ALL	4	ALL	15.1	69	86	21,427	19,825	7.5	128.3	160.0	41.0	15.9

Crush Cruise Map



Crush Cruise Map





Forest Practices Application/Notification Notice of Decision

FPA/N No: 2422524

Effective Date: 9/8/2021

Expiration Date: 9/8/2024

Shut Down Zone: 651 N

EARR Tax Credit: ☒ Eligible ☐ Non-eligible

Reference: Crush #30-100998

Decision

- ☐ **Notification Accepted** Operations shall not begin before the effective date.
- ☒ **Approved** This Forest Practices Application is subject to the conditions listed below.
- ☐ **Disapproved** This Forest Practices Application is disapproved for the reasons listed below.
- ☐ **Withdrawn** Applicant has withdrawn the Forest Practices Application/Notification (FPA/N).
- ☐ **Closed** All forest practices obligations are met.

FPA/N Classification

☐ Class II ☐ Class III ☐ Class IVG ☒ Class IVS

Number of Years Granted on Multi-Year Request

☐ 4 years ☐ 5 years

Conditions on Approval/Reasons for Disapproval

Due to potential for sediment to enter typed water from Ns crossing, notify DNR (2) two business days prior to this activity. Contact Matt Brady at (360) 538-7661 and/or email southpuget.forestpractices@dnr.wa.gov.

Issued By: Matt Brady

Region: South Puget Sound

Title: Resource Protection Forester

Date: 9/8/2021

Copies to: ☒ Landowner, Timber Owner and Operator

Issued in person: ☒ Landowner ☒ Timber Owner ☒ Operator

By: mi Jensen

Appeal Information

You have thirty (30) days to **file** (i.e., **actually deliver**) an appeal in writing of this Decision and any related State Environmental Policy Act (SEPA) determinations to the Pollution Control Hearings Board, the Attorney General's Office, and the Department of Natural Resources' region office. See [RCW 76.09.205](http://www.wa.gov/RCW76.09.205). The appeal period starts when the applicant receives this decision, which usually happens electronically on the date indicated below.

You must file your appeal at all three addresses below:

Pollution Control Hearings Board	Office of the Attorney General Natural Resources Division	Department Of Natural Resources South Puget Sound Region
<u>Physical Address</u> 1111 Israel Road SW Suite 301 Tumwater, WA 98501	<u>Physical Address</u> 1125 Washington Street, SE Olympia, WA 98504	<u>Physical Address</u> 950 Farman Ave N Enumclaw, WA 98022
<u>Mailing address</u> Post Office Box 40903 Olympia, WA 98504-0903	<u>Mailing Address</u> Post Office Box 40100 Olympia, WA 98504-0100	<u>Mailing Address</u> 950 Farman Ave N Enumclaw, WA 98022

Information regarding the Pollution Control Hearings Board can be found at: <http://www.eluho.wa.gov/>

Other Applicable Laws

Operating as described in this application/notification does not ensure compliance with the Endangered Species Act, or other federal, state, or local laws.

Transfer of Forest Practices Application/Notification (WAC 222-20-010)

Use the "Notice of Transfer of Approved Forest Practices Application/Notification" form. This form is available at region offices and on the Forest Practices website: <https://www.dnr.wa.gov/programs-and-services/forest-practices/review-applications-fpars/forest-practices-forms-and>. Notify DNR of new Operators within 48 hours.

Continuing Forestland Obligations (RCW 76.09.060, RCW 76.09.070, RCW 76.09.390, and WAC 222-20-055)

Obligations include reforestation, road maintenance and abandonment plans, conversions of forestland to non- forestry use and/or harvest strategies on perennial non-fish habitat (Type Np) waters in Eastern Washington.

Before the sale or transfer of land or perpetual timber rights subject to continuing forest and obligations, the seller must notify the buyer of such an obligation on a form titled "Notice of Continuing Forest Land Obligation". The seller and buyer must both sign the "Notice of Continuing Forest Land Obligation" form and send it to the DNR Region Office for retention. This form is available at DNR region offices.

If the seller fails to notify the buyer about the continuing forestland obligation, the seller must pay the buyer's costs related to continuing forestland obligations, including all legal costs and reasonable attorneys' fees incurred by the buyer in enforcing the continuing forestland obligation against the seller.

Failure by the seller to send the required notice to DNR at the time of sale will be prima facie evidence in an action by the buyer against the seller for costs related to the continuing forestland obligation prior to sale.

DNR Affidavit of Mailing

On this day 9/8/2021, I placed in the United States mail at Olympia, WA, postage paid, a true and accurate copy of this document. Notice of Decision FPA #2422524.

Meredith Dessens

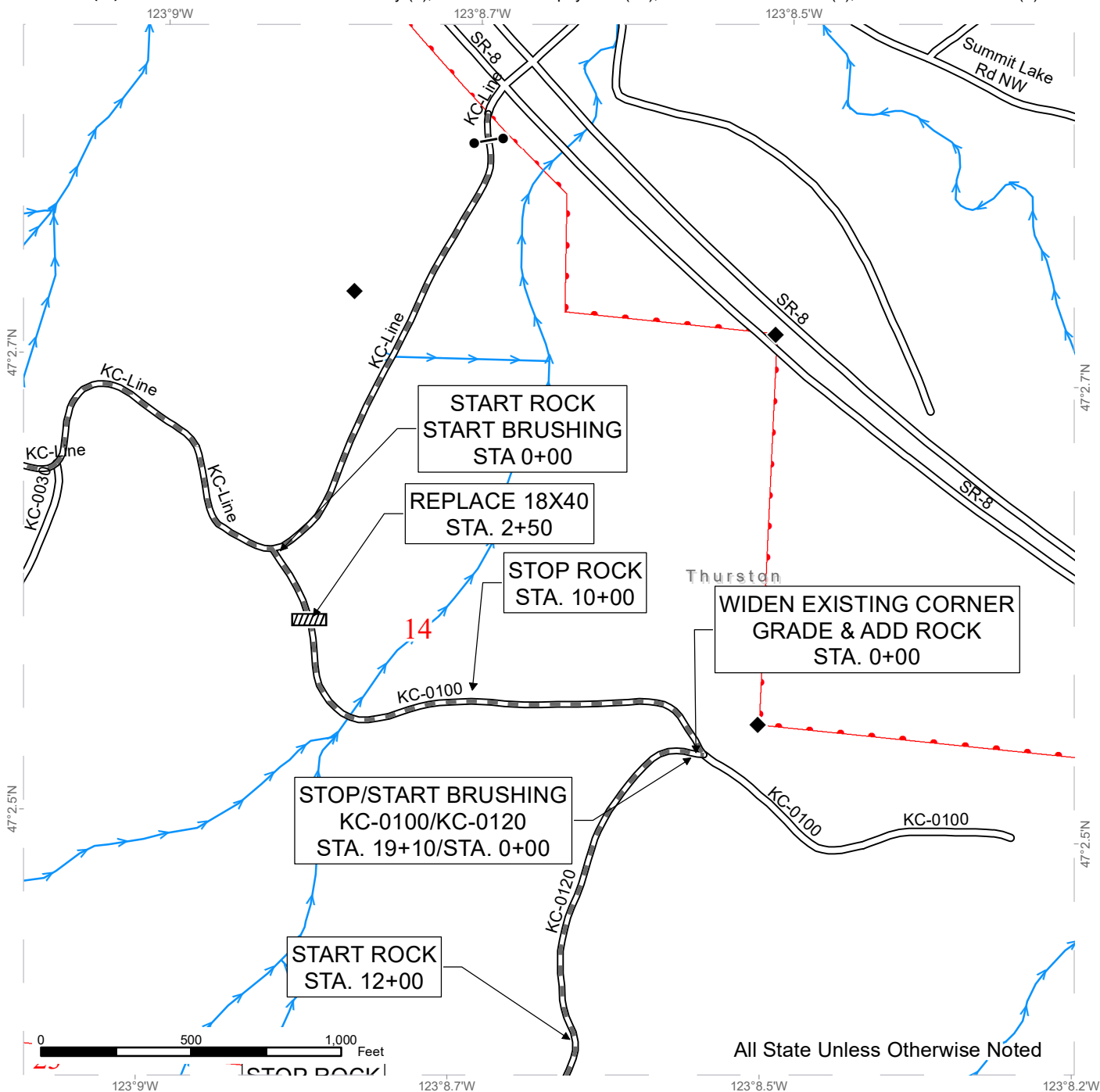
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(Signature)

ROAD WORK MAP 1 OF 9

SALE NAME: CRUSH
AGREEMENT#: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Thurston
ELEVATION RGE: 520-1240



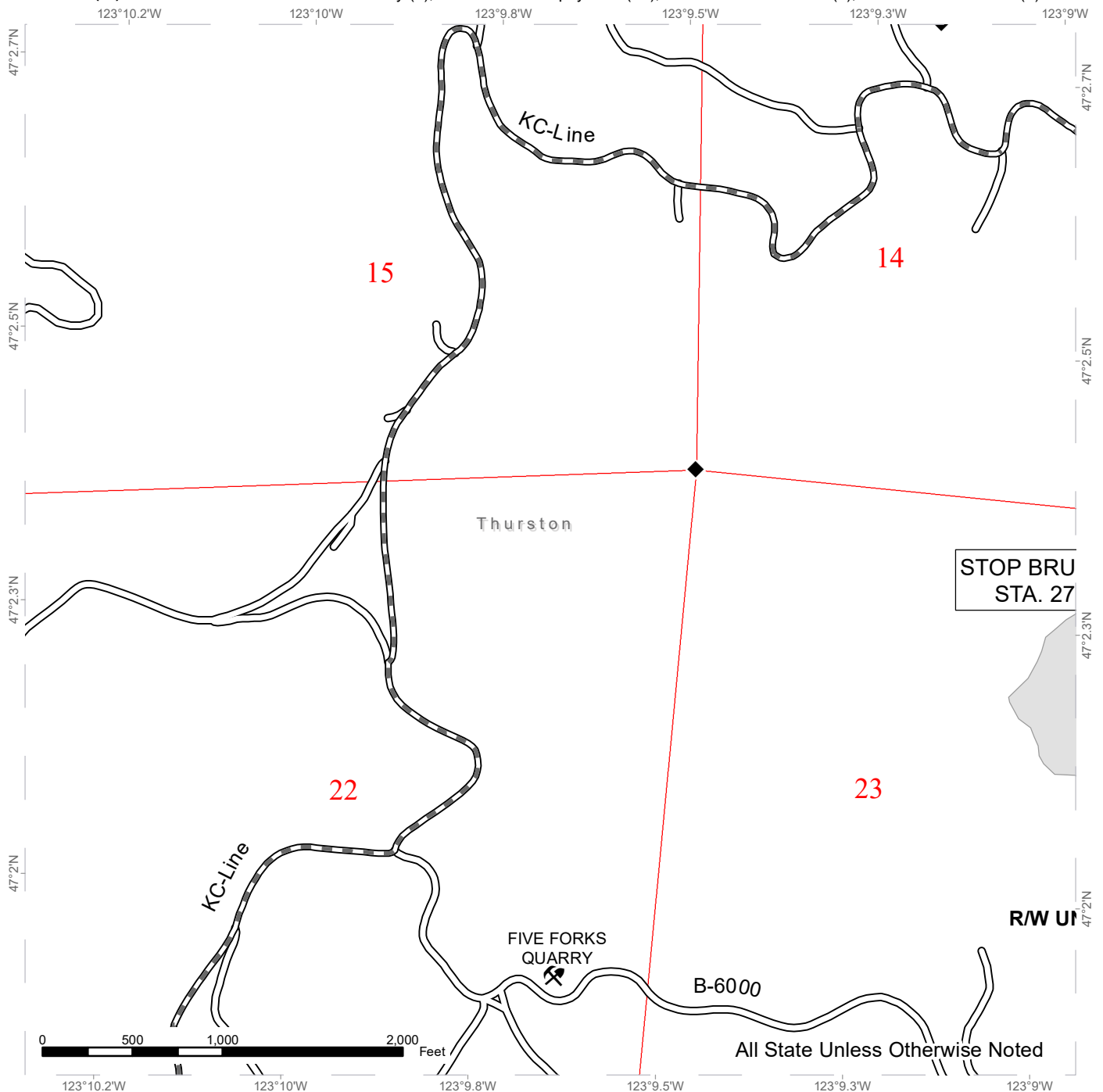
- Existing Roads
- Required Pre-Haul Maintenance
- Streams
- Cross Drains
- Gates (Corporate)
- Public Land Survey Sections
- Public Land Survey Townships



ROAD WORK MAP 2 OF 9

SALE NAME: CRUSH
AGREEMENT#: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Thurston
ELEVATION RGE: 520-1240

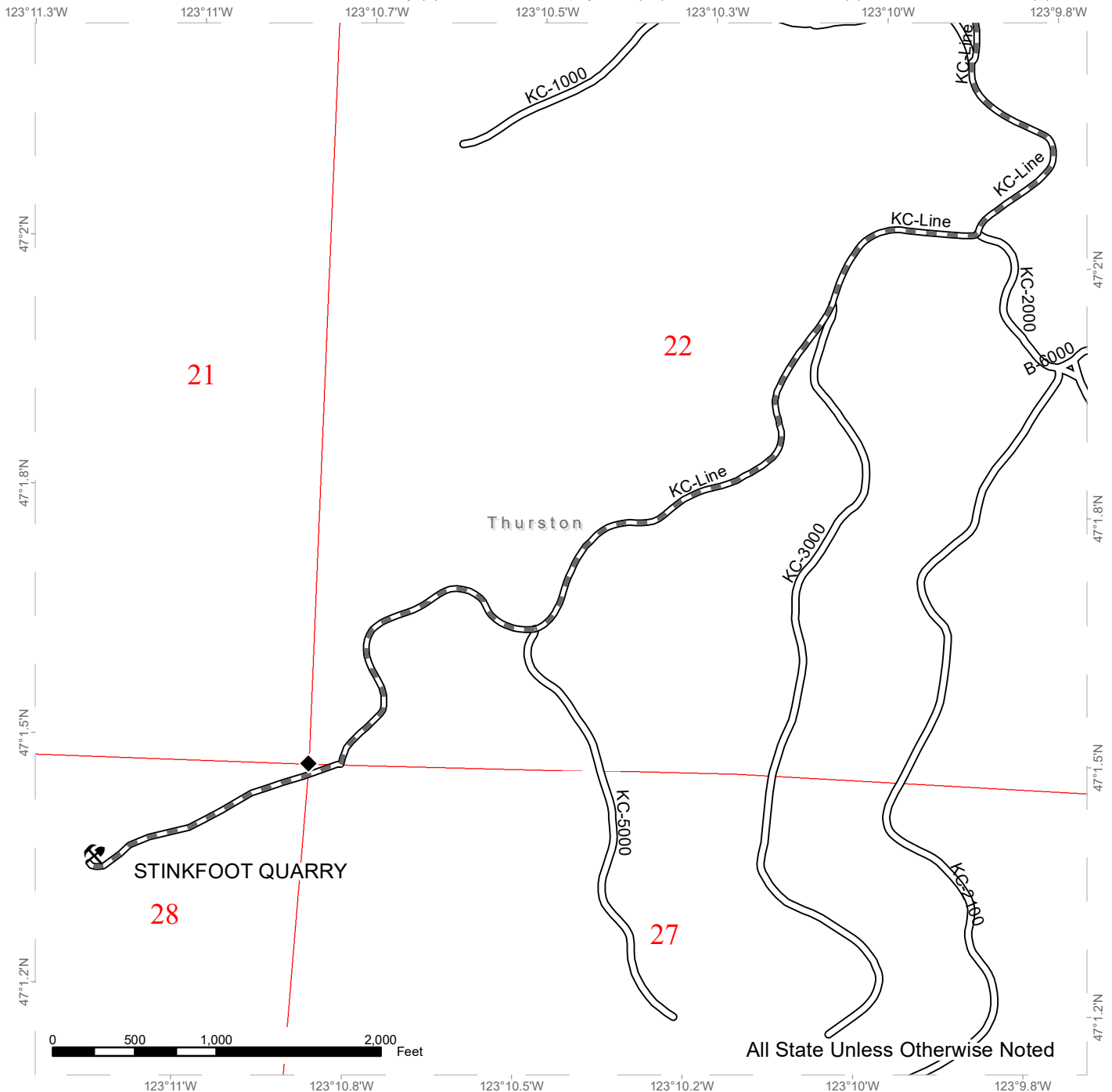


- Existing Roads
- Required Pre-Haul Maintenance
- Rock Pit (Corporate)
- Timber Sale Units
- Public Land Survey Townships
- Public Land Survey Sections

ROAD WORK MAP 3 OF 9

SALE NAME: CRUSH
AGREEMENT#: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Thurston
ELEVATION RGE: 520-1240

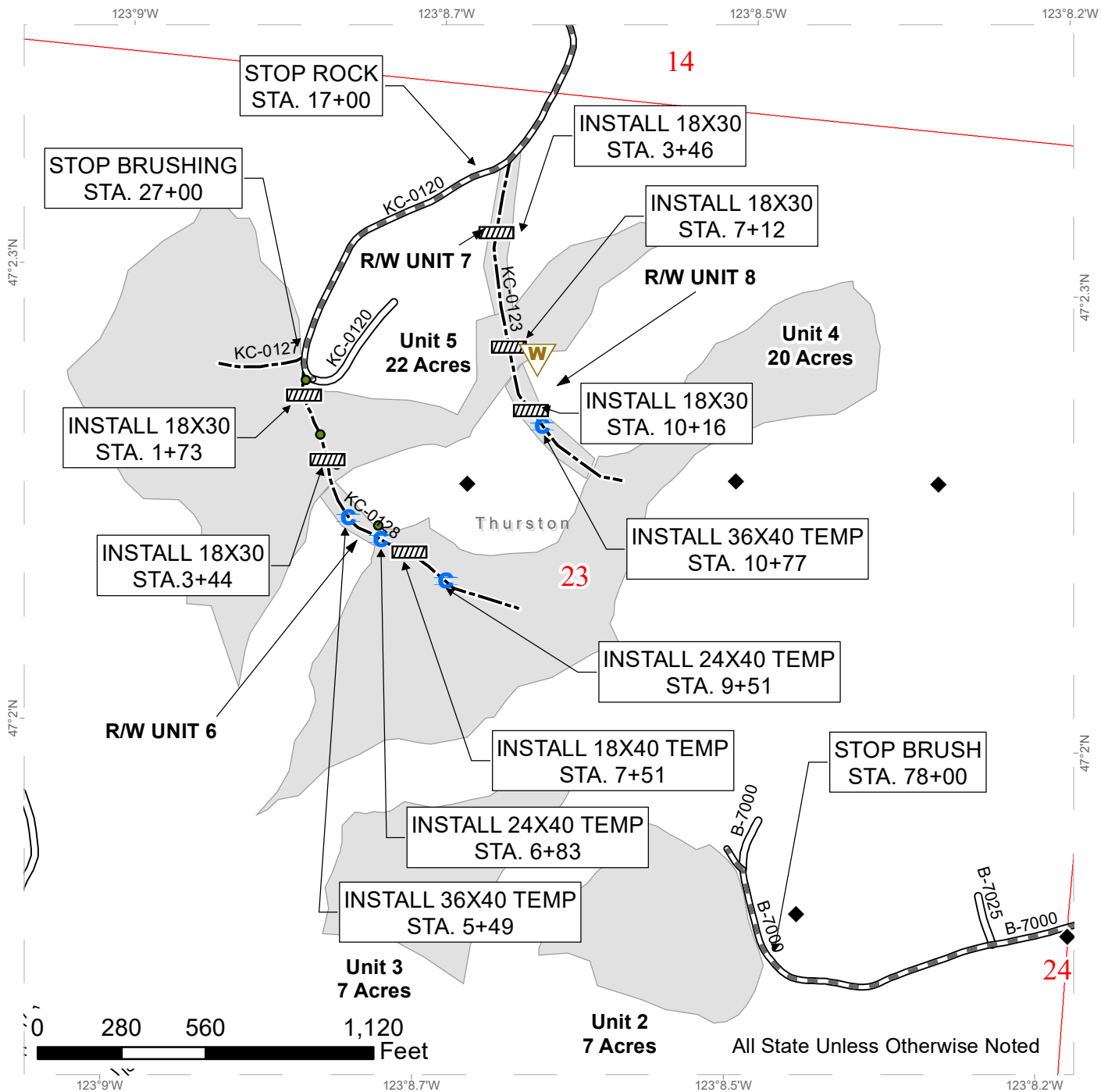


- Existing Roads
- Required Pre-Haul Maintenance
- Rock Pit (Corporate)
- Public Land Survey Townships
- Public Land Survey Sections

ROAD WORK MAP 4 OF 9

SALE NAME: CRUSH
AGREEMENT#: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Thurston
ELEVATION RGE: 520-1240

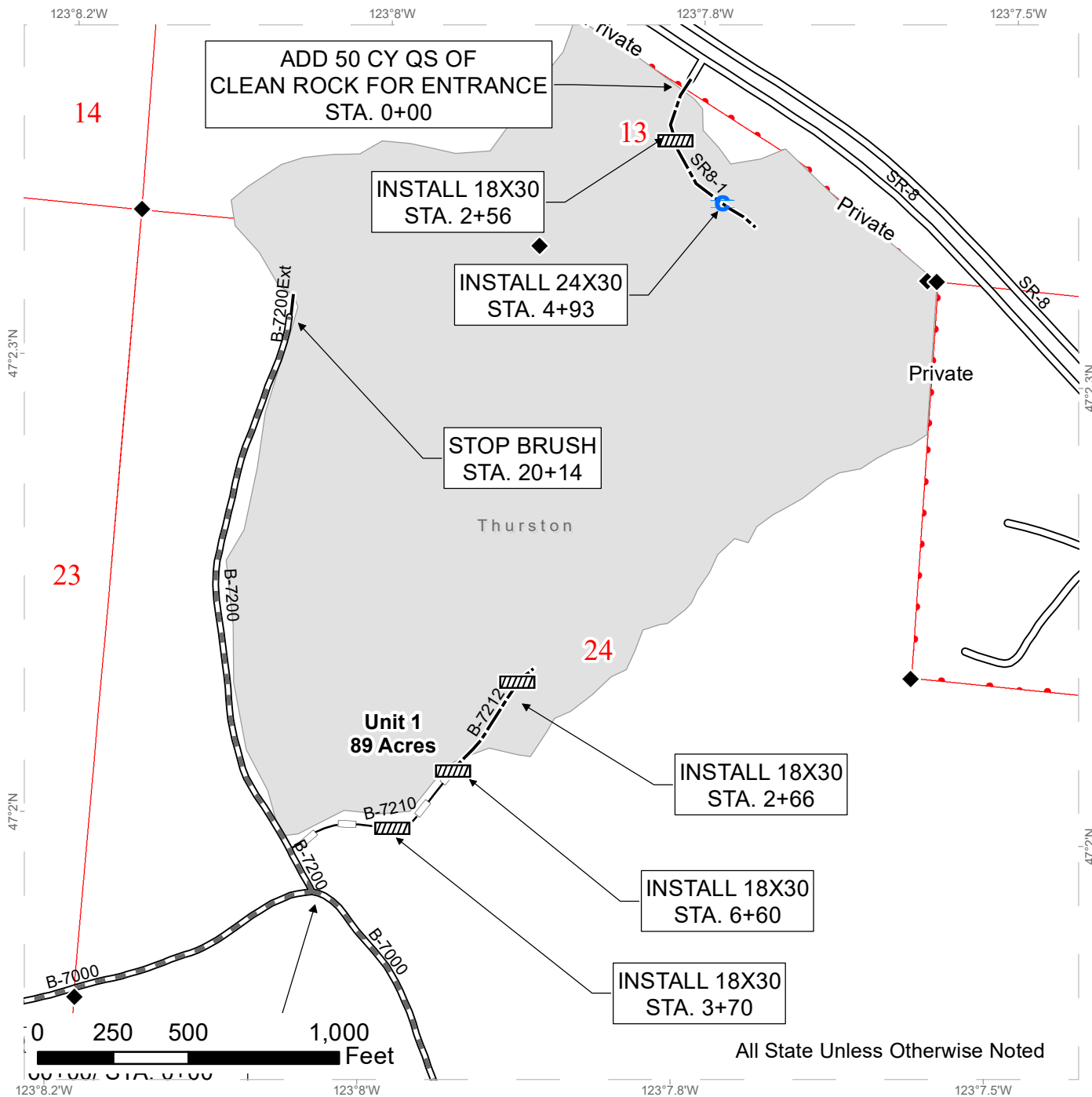


- | | |
|-------------------------------|------------------------------|
| Existing Roads | Timber Sale Units |
| Required Pre-Haul Maintenance | Public Land Survey Townships |
| Optional Construction | Public Land Survey Sections |
| Cross Drain | Survey Monument |
| Culvert | DNR Managed Lands |
| Waste Area | |

ROAD WORK MAP 5 OF 9

SALE NAME: CRUSH
AGREEMENT#: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Thurston
ELEVATION RGE: 520-1240

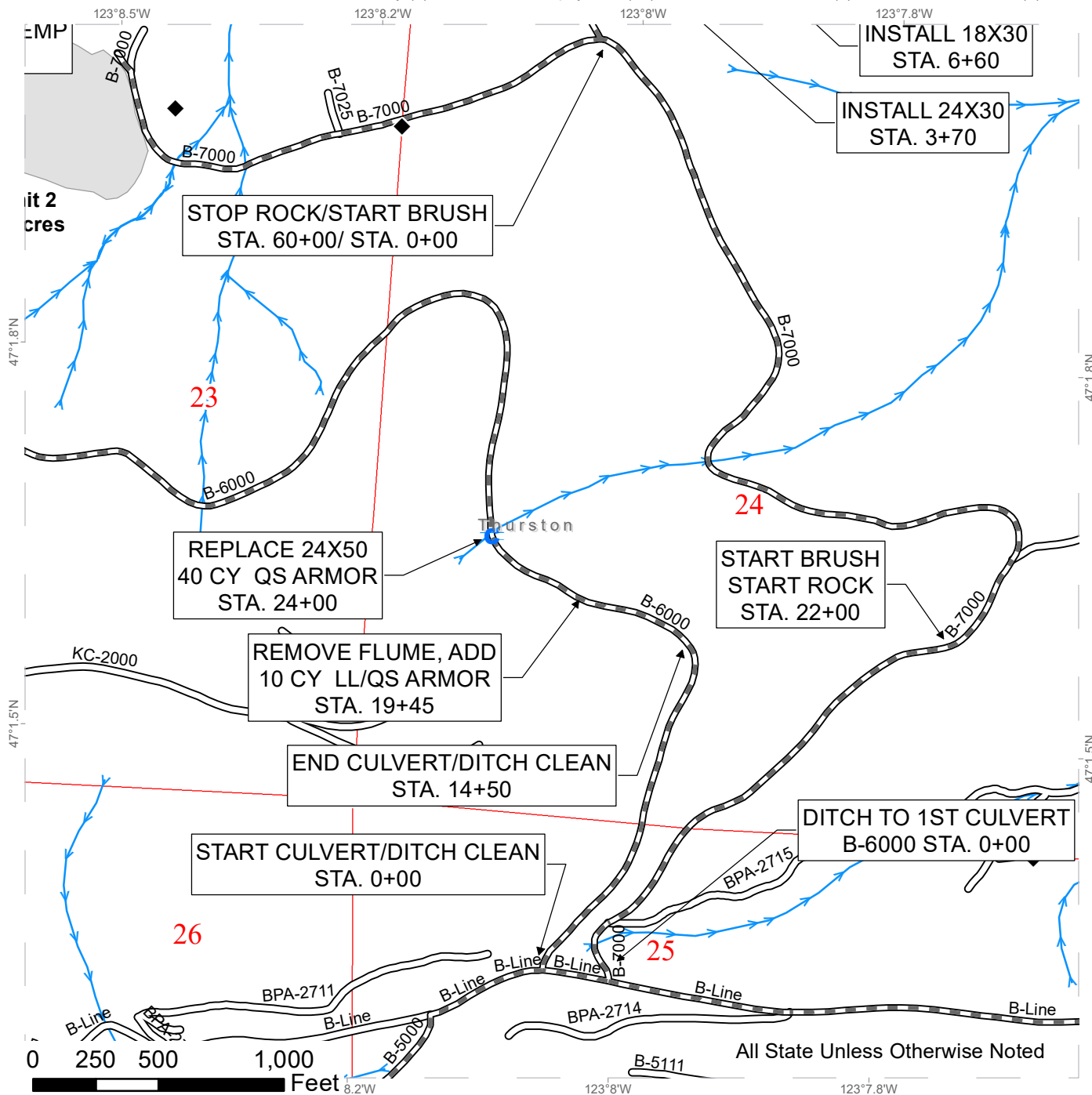


- | | |
|-------------------------------|------------------------------|
| Existing Roads | Timber Sale Units |
| Required Pre-Haul Maintenance | Public Land Survey Townships |
| Optional Construction | Public Land Survey Sections |
| Optional Reconstruction | Survey Monument |
| Cross Drain | DNR Managed Lands |
| Culvert | |

ROAD WORK MAP 6 OF 9

SALE NAME: CRUSH
AGREEMENT#: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Thurston
ELEVATION RGE: 520-1240



- | | |
|-------------------------------|-----------------------------|
| Existing Roads | Public Land Survey Sections |
| Required Pre-Haul Maintenance | Survey Monument |
| Streams | |
| Culvert | |
| Timber Sale Units | |
| Public Land Survey Townships | |

ROAD WORK MAP 7 OF 9

SALE NAME: CRUSH

AGREEMENT#: 30-100998

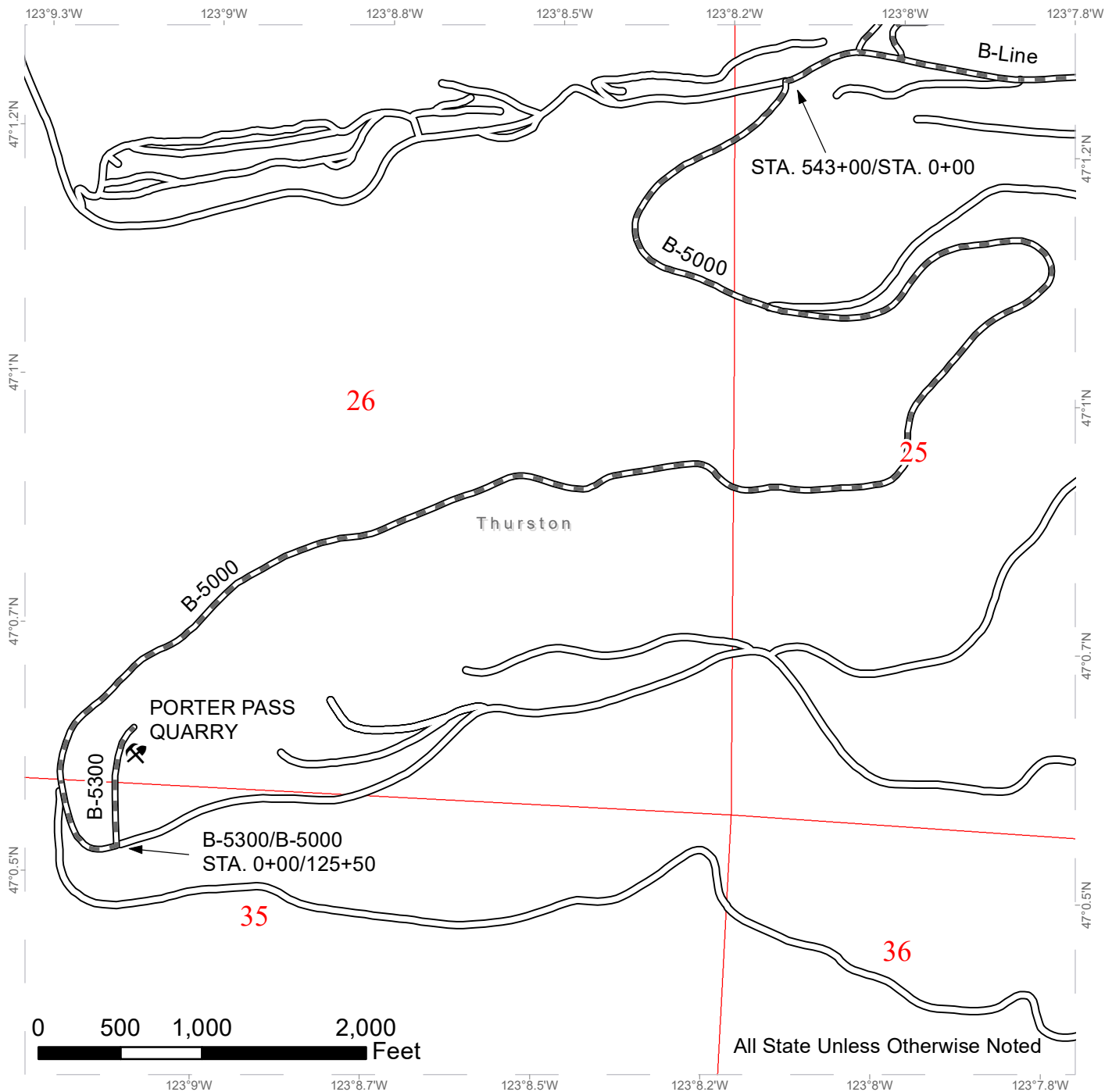
TOWNSHIP(S): T18R4W

TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region

COUNTY(S): Thurston

ELEVATION RGE: 520-1240



- Existing Roads
- Required Pre-Haul Maintenance
- Rock Pit (Corporate)
- Public Land Survey Townships
- Public Land Survey Sections

ROAD WORK MAP 8 OF 9

SALE NAME: CRUSH

AGREEMENT#: 30-100998

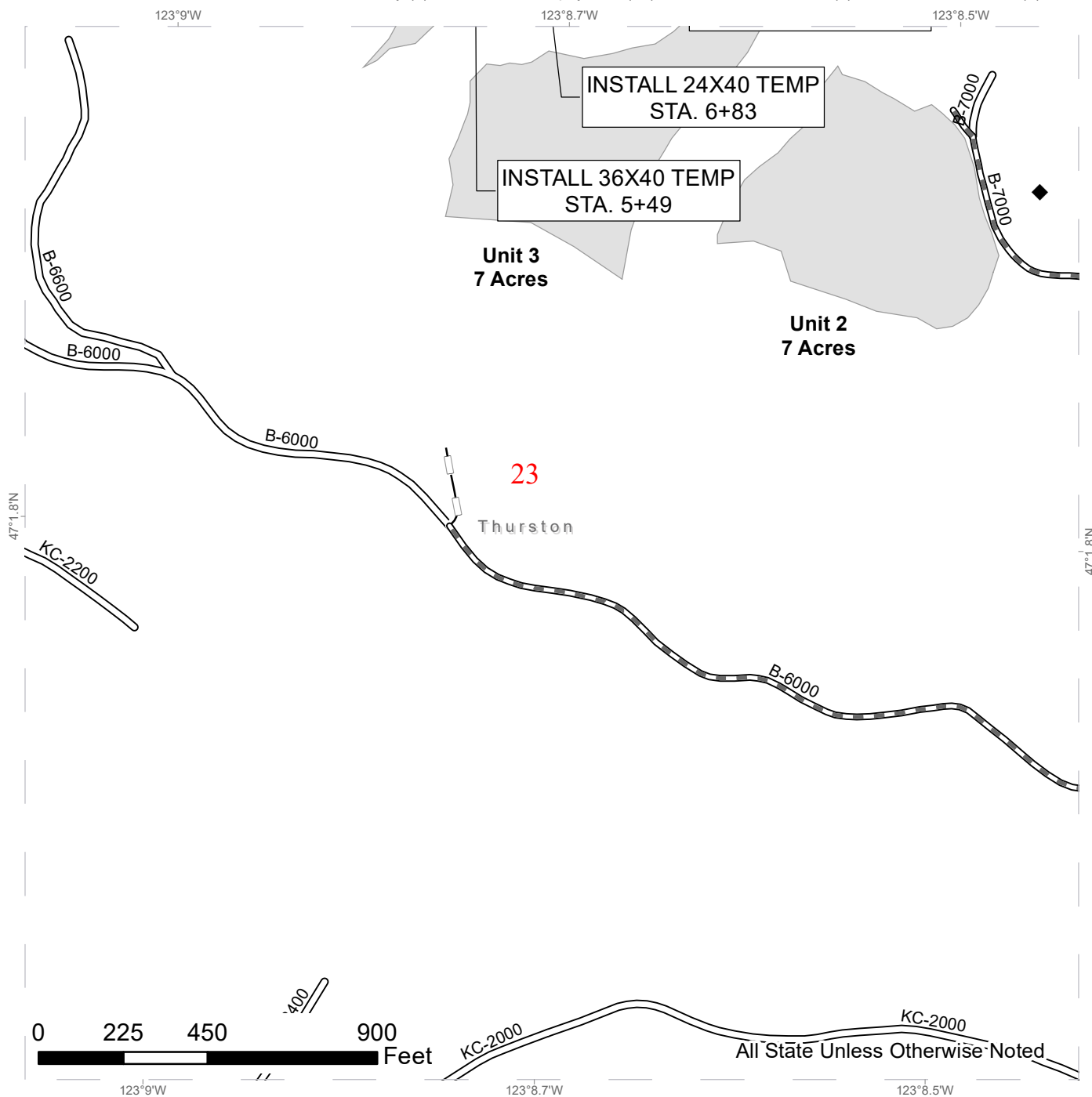
TOWNSHIP(S): T18R4W

TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region

COUNTY(S): Thurston

ELEVATION RGE: 520-1240



- Existing Roads
- Required Pre-Haul Maintenance
- Optional Reconstruction
- Timber Sale Units
- Public Land Survey Townships
- Public Land Survey Sections

ROAD WORK MAP 9 OF 9

SALE NAME: CRUSH

AGREEMENT#: 30-100998

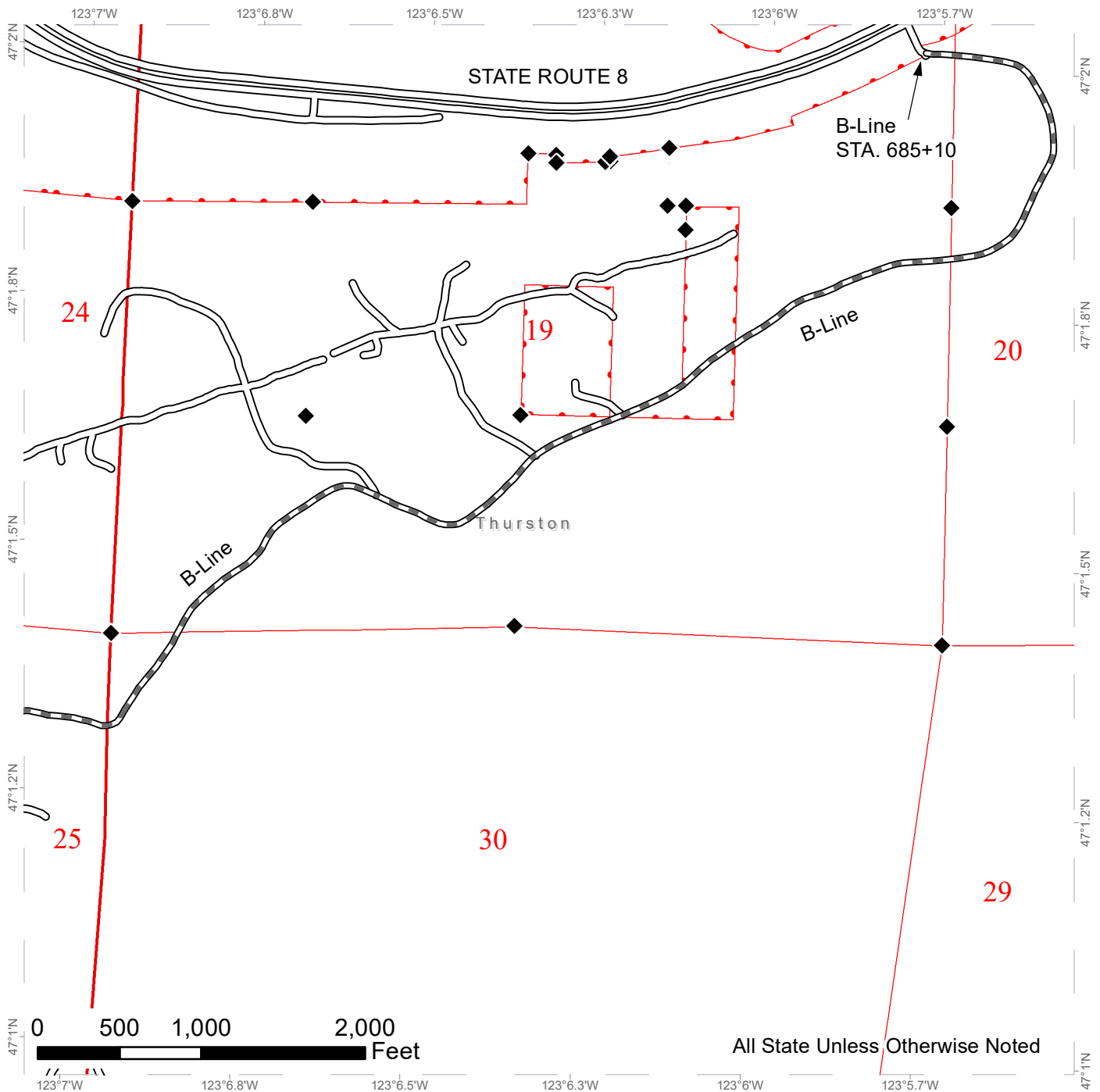
TOWNSHIP(S): T18R4W

TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region

COUNTY(S): Thurston

ELEVATION RGE: 520-1240



- Existing Roads
- Required Pre-Haul Maintenance
- Public Land Survey Townships
- Public Land Survey Sections
- Survey Monument
- DNR Managed Lands

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

CRUSH TIMBER SALE ROAD PLAN
THURSTON COUNTY
DELPHI UNIT
BLACK HILLS DISTRICT

AGREEMENT NO.: 30-100998

STAFF ENGINEER: JACOB GROSS

DATE: MAY 1ST 2021

DRAWN & COMPILED BY: JACOB GROSS

SECTION 0 – SCOPE OF PROJECT

0-1 ROAD PLAN SCOPE

Clauses in this road plan apply to all road related work, including landings and rock source development, unless otherwise noted.

0-2 REQUIRED ROADS

The specified work on the following roads is required.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
B-line	543+00 to 685+10	Pre-Haul Maintenance
B-5000	0+00 to 125+50	Pre-Haul Maintenance
B-5300	0+00 to 7+53	Pre-Haul Maintenance
B-6000	0+00 to 68+00	Pre-Haul Maintenance
B-7000	0+00 to 82+10	Pre-Haul Maintenance
B-7028	0+00 to 0+87	Pre-Haul Maintenance
B-7200	0+00 to 20+14	Pre-Haul Maintenance
B-7212	0+00 to 4+21	Abandonment, if built
KC-Line	0+00 to 192+30	Pre-Haul Maintenance
KC-0100	0+00 to 19+10	Pre-Haul Maintenance
KC-0120	0+00 to 27+77	Pre-Haul Maintenance
KC-0123	5+38 to 13+57	Abandonment, if built
KC-0127	0+00 to 2+94	Abandonment, if built
KC-0128	4+87 to 12+77	Abandonment, if built
KC-6500	0+00 to 16+75	Pre-Haul Maintenance
SR8-1	0+00 to 6+25	Abandonment, if built

0-3 OPTIONAL ROADS

The specified work on the following roads is not required. Any optional roads built by the Purchaser must meet all the specifications in the road plan.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
B-6008	0+00 to 2+18	Reconstruction

B-7200Ext	0+00 to 0+85	Construction
B-7210	0+00 to 6+60	Reconstruction
B-7212	0+00 to 4+21	Construction
KC-0123	0+00 to 13+57	Construction
KC-0127	0+00 to 2+94	Construction
KC-0128	0+00 to 12+77	Construction
SR8-1	0+00 to 6+25	Construction

0-4 CONSTRUCTION

Construction includes, but is not limited to:

- Clearing
- Grubbing
- Right-of-way debris disposal
- Excavation and/or embankment to subgrade
- Turnout and turnaround construction
- Landing construction
- Acquisition and installation of drainage structures
- Installation of temporary fish structure (36" CPP)
- Acquisition, manufacture, and application of rock

0-5 RECONSTRUCTION

This project includes, but is not limited to the following reconstruction requirements:

- Clearing
- Grubbing
- Right-of-way debris disposal
- Excavation and/or embankment to subgrade
- Ditch construction
- Acquisition and installation of drainage structures
- Acquisition, manufacture, and application of rock

0-6 PRE-HAUL MAINTENANCE

This project includes, but is not limited to the following pre-haul maintenance requirements:

- Cleaning ditches
- Cleaning culverts, and catchbasins
- Ditch reconstruction
- Reconstructing headwalls
- Constructing catchbasin and headwall
- Acquisition, manufacture and application of rock
- Cross drain culvert replacement
- Grading and shaping existing road surface and turnouts

0-7 POST-HAUL MAINTENANCE

This project includes post-haul road maintenance listed in Clause 9-5 POST-HAUL MAINTENANCE.

0-10 ABANDONMENT

This project includes abandonment listed in Clause 9-21 ROAD ABANDONMENT.

0-12 DEVELOP ROCK SOURCE

Purchaser may develop an existing rock source. Rock source development may involve, Clearing, Stripping, Drilling, and blasting. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

If the Purchaser desires a change from this road plan including, but not limited to, relocation, extension, change in design, or adding roads; a revised road plan must be submitted in writing to the Contract Administrator for consideration. Before work begins, Purchaser shall obtain approval from the State for any submitted plan that changes the scope of work or environmental condition from the original road plan.

1-2 UNFORESEEN CONDITIONS

Quantities established in this road plan are minimum acceptable values. Additional quantities required by the state due to unforeseen conditions, or Purchaser's choice of construction season or techniques will be at the Purchaser's expense. Unforeseen conditions include, but are not limited to, solid subsurface rock, subsurface springs, saturated ground, and unstable soils.

1-3 ROAD DIMENSIONS

Purchaser shall perform road work in accordance with the dimensions shown on the TYPICAL SECTION SHEET and the specifications within this road plan, unless controlled by construction stakes or design data (plan, profile, and cross-sections).

1-4 ROAD TOLERANCES

Purchaser shall perform road work within the tolerances listed below. The tolerance class for each road is listed on the TYPICAL SECTION SHEET.

<u>Tolerance Class</u>	<u>A</u>	<u>B</u>	<u>C</u>
Road and Subgrade Width (feet)	+1.5	+1.5	+2.0
Subgrade Elevation (feet +/-)	0.5	1.0	2.0
Centerline alignment (feet lt./rt.)	1.0	1.5	3.0

1-6 ORDER OF PRECEDENCE

Any conflict or inconsistency in the road plan will be resolved by giving the documents precedence in the following order:

1. Addenda.
2. Designs or Plans. On designs and plans, figured dimensions shall take precedence over scaled dimensions.
3. Road Plan Clauses.

4. Typical Section Sheet.
5. Standard Lists.
6. Standard Details.
7. Road Plan Maps.

In case of any ambiguity or dispute over interpreting the road plan, the Contract Administrator's or designee's decision will be final.

1-8 REPAIR OR REPLACEMENT OF DAMAGED MATERIALS

Purchaser shall repair or replace all materials, roadway infrastructure, and road components damaged during road work or operation activities. The Contract Administrator will direct repairs and replacements. Repairs to structural materials must be made in accordance with the manufacturer's recommendation, and may not begin without written approval from the Contract Administrator.

1-9 DAMAGED METALLIC COATING

Any damaged galvanized or aluminized coating on existing or new bridge components, culverts, downspouts, and flumes must be cleaned and treated with a minimum of two coats of zinc rich paint.

SUBSECTION ROAD MARKING

1-15 ROAD MARKING

Purchaser shall perform road work in accordance with the state's marked location. All road work is marked as follows:

- Pre-haul activities: 2 in. x 48 in. wooden lath with station and activity
- Construction: Orange ribbon tied eye-height along centerline, w/orange pin flags or wooden lath marking centerline

1-16 CONSTRUCTION STAKES SET BY STATE

Purchaser shall perform work in accordance with the construction stakes and/or reference points set in the field for grade and alignment. Reconstruction of existing road grades must conform to the original location except where construction staked or designed.

1-18 REFERENCE POINT DAMAGE

Purchaser shall reset reference points (RPs) that were moved or damaged at any time during construction to their original locations. Excavation and embankment may not proceed on road segments controlled by said RPs until Purchaser resets all moved or damaged RPs.

SUBSECTION TIMING

1-20 COMPLETE BY DATE

Purchaser shall complete pre-haul road work before the start of timber haul.

1-21 HAUL APPROVAL

Purchaser shall not use roads under this road plan for any hauling, other than timber cut on the right-of-way, without written approval from the Contract Administrator.

1-22 WORK NOTIFICATIONS

On the following road(s), Purchaser shall notify the Contract Administrator a minimum of 2 weeks before work begins.

<u>Road</u>	<u>Stations</u>	<u>Comments</u>
SR8-1	0+00 to 6+25	Applies to each of the three work windows stated in DOT Access Permit ACP-60807. See Road Plan Clause 11-22 for additional notification requirements

1-23 ROAD WORK PHASE APPROVAL

Purchaser shall obtain written approval from the Contract Administrator upon completion of each of the following phases of road work:

- Drainage installation
- Subgrade compaction
- Rock compaction

SUBSECTION RESTRICTIONS

1-25 ACTIVITY TIMING RESTRICTION

The specified activities are not allowed during the listed closure period(s) unless authorized in writing by the Contract Administrator. The operation of road construction equipment is not allowed on weekends or state recognized holidays, unless authorized in writing by the Contract Administrator

<u>Activity</u>	<u>Closure Period</u>
All road work activities	November 1 to April 30

The specified activities are not allowed during the listed closure period(s) unless authorized in writing by the State.

<u>Road</u>	<u>Activity</u>	<u>Closure Period</u>	<u>Comments</u>
KC-0123 STA. 5+38 to 13+57	All road work activities	November 1 to June 30	Installation and removal must occur same season
SR8-1	All road work activities associated with DOT Permit ACP-60807	Jan 1 to Dec 31, with one 3 week exception.	All work shall start and finish within one three week time window

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a seasonal closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTION and Contract Clause H-130 HAULING SCHEDULE, the Purchaser shall comply with a maintenance plan to include further protection of water, soil, roads, and other forest assets at the Purchaser's expense. Preventative measures shall be in place prior to operating during the closure period. Purchaser is required to maintain all haul roads at their own expense including those listed in

Contract Clause C-060 DESIGNATED ROAD MAINTAINER. If other operators are using, or desire to use these roads, a joint operating plan must be developed. All parties shall follow this plan.

1-29 SEDIMENT RESTRICTION

Purchaser shall not allow silt-bearing runoff to enter any streams. Purchaser shall accomplish sediment removal through silt traps, silt fences, settling ponds, or other methods as approved, in writing by the Contract Administrator.

1-30 CLOSURE TO PREVENT DAMAGE

In accordance with Contract Clause G-220 STATE SUSPENDS OPERATION, the Contract Administrator will suspend road work or hauling right-of-way timber, forest products, or rock under the following conditions:

- Wheel track rutting exceeds 6 inches on jaw run roads.
- Wheel track rutting exceeds 4 inches on crushed rock roads.
- Surface or base stability problems persist.

Operations must stop unless authority to continue working or hauling is granted in writing by the Contract Administrator. In the event that surface or base stability problems persist, Purchaser shall cease operations, or perform corrective maintenance or repairs, subject to specifications within this road plan.

1-32 BRIDGE AND ASPHALT SURFACE RESTRICTION

The use of metal tracked equipment is not allowed on bridge or asphalt surfaces at any time. If Purchaser must run equipment on bridge or asphalt surfaces, then rubber tired equipment or other methods, approved in writing by Contract Administrator, must be used.

Purchaser shall remove any dirt, rock, or other material tracked or spilled on the bridge or asphalt surface(s) and have surface(s) evaluated for any damage caused by transporting equipment. Any damage to the surface(s) will be repaired, at the Purchaser's expense, as directed by the Contract Administrator.

1-33 SNOW PLOWING RESTRICTION

Snowplowing will be allowed after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contract Administrator upon request. Purchaser shall request a SNOW PLOWING AGREEMENT each time plowing occurs. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

SUBSECTION OTHER INFRASTRUCTURE

1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS

Purchaser shall immediately remove any mud, dirt, rock, or other material tracked or spilled on to county roads and state highways.

If additional damage to the surface, signs, guardrails, etc. occurs then the damage will be repaired, at the Purchaser's expense, as directed by the Contract Administrator when authorized by the county or WSDOT.

1-41 REQUIREMENTS FOR PAVED ROAD APPROACHES

Requirements for the State Route 8 (SR8) road approaches:

Purchaser shall build up approaches to allow a smooth grade transition between the SR8-1 and SR8 roads. The top of the SR8-1 road surfacing must be kept level with the surface of the SR8 road at all times. The surface of the SR8-1 approach must slope down from the edge of the SR8 road at the rate of 2 inch(es) per foot for a distance of 50 feet , unless otherwise shown in the approach permit.

1-43 ROAD WORK AROUND UTILITIES

Road work is in close proximity to a utility. Known utilities are listed, but it is the Purchaser's responsibility to identify any utilities not listed. Purchaser shall work in accordance with all applicable laws or rules concerning utilities. Purchaser is responsible for all notification, including "call before you dig", and liabilities associated with the utilities and their rights-of-way.

<u>Road</u>	<u>Stations</u>
SR8-1	0+00

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

Purchaser shall maintain all roads used under this contract in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS for the entire term of this contract. Maintenance is required even during periods of inactivity.

2-2 ROAD MAINTENANCE – PURCHASER MAINTENANCE

Purchaser shall perform maintenance on roads listed in Contract Clause C-050 PURCHASER ROAD MAINTENANCE AND REPAIR in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER

Purchaser may be required to perform maintenance on roads listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER as directed by the Contract Administrator. Purchaser shall maintain roads in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-5 MAINTENANCE GRADING – EXISTING ROAD

On the following roads, Purchaser shall use a grader to shape the existing surface before rock application and/or timber haul.

<u>Road</u>	<u>Stations</u>
B-line	543+00 to 685+10
B-5000	0+00 to 125+50
B-5300	0+00 to 7+53
B-6000	0+00 to 68+00
B-7000	0+00 to 82+10

B-7028	0+00 to 0+87
B-7200	0+00 to 20+14
KC-Line	0+00 to 192+30
KC-0100	0+00 to 19+10
KC-0120	0+00 to 27+77
KC-6500	0+00 to 16+75

2-6 CLEANING CULVERTS

On the following roads, Purchaser shall clean the inlets and outlets of all culverts:

<u>Road</u>	<u>Stations</u>	<u>Comments</u>
B-6000	0+00 to 14+50	Clean Inlet & Outlet, Organic Debris/Soil
B-7000	0+75	Clean Outlet when ditching this segment

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following road(s), Purchaser shall clean ditches, headwalls, and catchbasins. Work must be completed before timber haul and must be done in accordance with the TYPICAL SECTION SHEET. Pulling ditch material across the road or mixing in with the road surface is not allowed.

<u>Road</u>	<u>Stations</u>
B-6000	0+00 to 14+50
B-7000	0+00 to 1+00

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

SUBSECTION BRUSHING

3-1 BRUSHING

On the following road(s), Purchaser shall cut vegetative material up to 5 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by manual or mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation may not be disturbed unless directed by the Contract Administrator. Purchaser shall remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets.

<u>Road</u>	<u>Stations</u>
B-7000	22+00 to 60+00
B-7200	0+00 to 20+14
KC-0100	0+00 to 19+10
KC-0120	0+00 to 27+00

SUBSECTION CLEARING

3-5 CLEARING

Purchaser shall fall all vegetative material larger than 2 inches DBH or over 5 feet high between the marked right-of-way boundaries or if not marked in the field, between the clearing limits specified on the TYPICAL SECTION SHEET. Clearing must be completed before starting excavation and embankment.

3-6 CLEARING WITHIN RIPARIAN AREA AT TYPE 1-3 STREAM CROSSING

Purchaser shall place a log, with length equal to two (2) times the width of the ordinary high water, from the largest diameter class conifer tree cut from within the Inner Zone (25 feet either side of the stream) in the stream in accordance with the TYPICAL RIPARIAN STRATEGY STREAM CROSSING DETAIL.

3-8 PROHIBITED DECKING AREAS

Purchaser shall not deck right-of-way timber in the following areas:

- Within the grubbing limits.
- Within 50 feet of any stream.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Against state owned standing trees.

SUBSECTION GRUBBING

3-10 GRUBBING

Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET and within waste and debris areas. Purchaser shall also remove stumps with undercut roots outside the grubbing limits. Grubbing must be completed before starting excavation and embankment.

3-11 GRUBBING WITHIN RIPARIAN AREA AT TYPE 1-3 STREAM CROSSING

Purchaser shall retain all grubbed stumps (root wads) within the Inner Zone (25 feet either side of the stream) for placement in accordance with the TYPICAL RIPARIAN STRATEGY STREAM CROSSING DETAIL. Three root wads must be placed in or adjacent to the stream channel. The remaining stumps grubbed from the Inner Zone must be placed at least 50 feet from the roadway in the Middle (25 feet to 100 feet from the stream) or the Outer Zones (remaining portion of RMZ).

SUBSECTION ORGANIC DEBRIS

3-20 ORGANIC DEBRIS DEFINITION

Organic debris is defined as all vegetative material not eligible for removal by Contract Clause G-010 PRODUCTS SOLD AND SALE AREA or G-011 RIGHT TO REMOVE FOREST PRODUCTS AND CONTRACT AREA, that is larger than one cubic foot in volume within the grubbing limits as shown on the TYPICAL SECTION SHEET.

3-21 DISPOSAL COMPLETION

Purchaser shall remove organic debris from the road surface, ditchlines, and culvert inlets and outlets. Purchaser shall complete all disposal of organic debris, before the application of rock and/or timber haul.

3-23 PROHIBITED DISPOSAL AREAS

Purchaser shall not place organic debris in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland.
- On road subgrades, or excavation and embankment slopes.
- On slopes greater than 55%.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush can fall into the ditch or onto the road surface.
- Against State owned standing timber.

3-24 BURYING ORGANIC DEBRIS RESTRICTED

Purchaser shall not bury organic debris unless otherwise stated in this plan.

3-25 SCATTERING ORGANIC DEBRIS

Purchaser shall scatter organic debris outside of the clearing limits in natural openings. Where natural openings are unavailable or restrictive, alternate debris disposal methods are subject to the written approval of the Contract Administrator.

SECTION 4 – EXCAVATION

4-2 PIONEERING

Pioneering may not extend past construction that will be completed during the current construction season. In addition, the following actions must be taken as pioneering progresses:

- Drainage must be provided on all uncompleted construction as approved, in writing, by the Contract Administrator.
- Road pioneering operations may not undercut the final cut slope, deposit excavated material outside the grubbing limits, or restrict drainage.
- Culverts at live stream crossings must be installed during pioneering operations

4-3 ROAD GRADE AND ALIGNMENT STANDARDS

Purchaser shall follow these standards for road grade and alignment except as designed:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 15 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 6% in 100 feet.
- Maximum grade change for crest vertical curves is 4% in 100 feet.

4-5 CUT SLOPE RATIO

Purchaser shall construct excavation slopes no steeper than shown on the following table, unless construction staked or designed:

<u>Material Type</u>	<u>Excavation Slope Ratio</u>	<u>Excavation Slope Percent</u>
Common Earth (on side slopes up to 55%)	1:1	100
Common Earth (56% to 70% side slopes)	$\frac{3}{4}$:1	133
Common Earth (on slopes over 70%)	$\frac{1}{2}$:1	200
Fractured or loose rock	$\frac{1}{2}$:1	200
Hardpan or solid rock	$\frac{1}{4}$:1	400

4-6 EMBANKMENT SLOPE RATIO

Purchaser shall construct embankment slopes no steeper than shown on the following table:

<u>Material Type</u>	<u>Embankment Slope Ratio</u>	<u>Embankment Slope Percent</u>
Sandy Soils	2:1	50
Common Earth and Rounded Gravel	$1\frac{1}{2}$:1	67
Angular Rock	$1\frac{1}{4}$:1	80

4-7 SHAPING CUT AND FILL SLOPE

Purchaser shall construct excavation and embankment slopes to a uniform line and left rough for easier revegetation.

4-8 CURVE WIDENING

The minimum widening placed on the inside of curves is:

- 6 feet for curves of 50 to 79 feet radius.
- 4 feet for curves of 80 to 100 feet radius

4-9 EMBANKMENT WIDENING

The minimum embankment widening is:

- 2 feet for embankment heights at centerline of less than 6 feet.
- 4 feet for embankment heights at centerline of 6 feet or greater.

Purchaser shall apply embankment widening equally to both sides of the road to achieve the required width.

SUBSECTION DITCH CONSTRUCTION

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

Purchaser shall construct or reconstruct ditches into the subgrade as specified on the TYPICAL SECTION SHEET. Ditches must be constructed concurrently with construction of the subgrade.

4-28 DITCH DRAINAGE

Ditches shall be constructed concurrently with construction of the subgrade. Ditches must drain to cross-drain culverts or ditchouts.

4-29 DITCHOUTS

Purchaser shall construct ditchouts as identified in maps, in field, and as directed by the Contract Administrator. Ditchouts must be constructed in a manner that diverts ditch water onto the forest floor and must have excavation backslopes no steeper than a 1:1 ratio.

SUBSECTION WASTE MATERIAL (DIRT)

4-35 WASTE MATERIAL DEFINITION

Waste material is defined as all dirt, rock, mud, or related material that is extraneous or unsuitable for construction material. Waste material, as used in Section 4 EXCAVATION, is not organic debris.

4-36 DISPOSAL OF WASTE MATERIAL

Purchaser may sidecast waste material on side slopes up to 45% if the waste material is compacted and free of organic debris.

4-37 WASTE AREA LOCATION

Purchaser shall deposit waste material in the listed designated areas. Additional waste areas may also be identified or approved by the Contract Administrator. The amount of material allowed in a waste area is at the discretion of the Contract Administrator.

<u>Road</u>	<u>Waste Area Location</u>	<u>Comments</u>	<u>Volume</u>
KC-0123	7+50	Waste outside of RMZ within timber sale unit	800 cy

4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas, except as otherwise specified in this plan:

- Within 25 feet of a cross drain culvert outlet.
- Within 100 feet of a live stream or wetland.
- On side slopes steeper than 45%.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Within the operational area for cable landings.
- Against standing timber.

SUBSECTION SHAPING

4-55 ROAD SHAPING

Purchaser shall shape each lift of the subgrade and surface as shown on the TYPICAL SECTION SHEET. The subgrade and surface shape must ensure runoff in an even, un-concentrated manner, and must be uniform, firm, and rut-free.

4-56 DRY WEATHER SHAPING

At any time of year, the Contract Administrator may require the application of water to facilitate shaping activities. The method of water application is subject to written approval by the Contract Administrator.

SUBSECTION COMPACTION

4-60 FILL COMPACTION

Purchaser shall compact all embankment and waste material in accordance with the COMPACTION LIST by routing equipment over the entire width of each lift. Waste material may be placed by end-dumping or sidecasting until sufficiently wide enough to support the equipment.

4-61 SUBGRADE COMPACTION

Purchaser shall compact constructed subgrades in accordance with the COMPACTION LIST by routing equipment over the entire width except ditch. On fills deeper than 5 feet at the road shoulder Purchaser shall compact fill material in lifts no greater than 18 inches. Purchaser shall obtain written approval from the Contract Administrator for subgrade compaction before rock application.

4-62 DRY WEATHER COMPACTION

At any time of year, the Contract Administrator may require the application of water to facilitate compaction activities. The method of water application is subject to written approval by the Contract Administrator.

4-63 EXISTING SURFACE COMPACTION

Purchaser shall compact maintained road surfaces in accordance with the COMPACTION LIST by routing equipment over the entire width.

SECTION 5 – DRAINAGE

5-1 REMOVAL OF SHOULDER BERMS

Purchaser shall remove berms from road shoulders to permit escape of runoff.

SUBSECTION CULVERTS

5-5 CULVERTS

Purchaser shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the CULVERT AND DRAINAGE LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts must be new material and meet the specifications in Clauses 10-15 through 10-23.

5-7 USED CULVERT MATERIAL

On temporary roads, Purchaser may install used culverts. All other roads must have new culverts installed. Culverts must meet the specifications in Clauses 10-15 through 10-24.

5-12 UNUSED MATERIALS STATE PROPERTY

On required roads, any materials listed on the CULVERT AND DRAINAGE LIST and materials listed in Clause 5-13 CONTINGENCY CULVERTS that are not installed will become the property of the state. Purchaser shall stockpile materials at Mima Mound Pit, located at 46.888952N, 123.054728W.

5-13 CONTINGENCY CULVERTS

The following culverts will be supplied by the Purchaser and are available for installation as directed by the Contract Administrator.

<u>Road</u>	<u>Size</u>
On any portion of road used for timber or rock haul.	Quantity 3 - 18"X30' Culvert Quantity 2 - 18" Culvert band

SUBSECTION CULVERT INSTALLATION**5-15 CULVERT INSTALLATION**

Culvert, downspout, flume and energy dissipater installation must be in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL and the Corrugated Polyethylene Pipe Association's "Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings". Culverts shall be banded using lengths of no less than 10 feet, and no more than one length less than 16 feet. Shorter section of banded culvert shall be installed at the inlet end.

5-17 CROSS DRAIN SKEW AND SLOPE

Cross drains, on road grades in excess of 3%, must be skewed at least 30 degrees from perpendicular to the road centerline, except where the cross drain is at the low point in the road culverts will not be skewed. Cross drain culverts must be installed at a slope steeper than the incoming ditch grade, but not less than 3% or more than 12%.

5-18 CULVERT DEPTH OF COVER

Cross drain culverts must be installed with a depth of cover of not less than 1 foot of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts must be installed with a depth of cover recommended by the culvert manufacturer for the type and size of the pipe.

SUBSECTION ENERGY DISSIPATERS**5-20 ENERGY DISSIPATERS**

Purchaser shall install energy dissipaters in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all culverts on the CULVERT LIST that specify the placement of rock. Energy dissipater installation is subject to approval by the Contract Administrator.

The type of energy dissipater and the amount of material must be consistent with the specifications listed on the CULVERT LIST. Placement must be by zero-drop-height method only. No placement by end dumping or dropping of rock is allowed. QUARRY SPALLS shall meet the specifications in Clause 6-43.

SUBSECTION CATCH BASINS, HEADWALLS, AND ARMORING

5-25 CATCH BASINS

Purchaser shall construct catch basins to resist erosion in accordance with CULVERT AND DRAINAGE SPECIFICATION DETAIL. Minimum dimensions of catch basins are 2 feet wide and 4 feet long.

5-26 HEADWALLS FOR CULVERTS

Purchaser shall construct headwalls in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all culverts on the CULVERT LIST that specify the placement of rock.

5-27 ARMORING FOR STREAM CROSSING CULVERTS

Purchaser shall place inlet and outlet protection in conjunction with or immediately following construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets as designated on CULVERT LIST. Rock may not restrict the flow of water into culvert inlets or catch basins. Rock must be set in place by machine. Placement must be by zero-drop-height method only.

5-33 NATIVE SURFACE ROADS

If overwintered, native surface roads must be waterbarred by November 1. Purchaser shall construct waterbars according to the attached DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical distance of no more than 10 feet between waterbars or between natural drainage paths, and with a maximum spacing of 300 feet.

SECTION 6 – ROCK AND SURFACING

SUBSECTION ROCK SOURCE

6-2 ROCK SOURCE ON STATE LAND

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following source(s) on state land at no charge to the Purchaser. Purchaser shall obtain written approval from the Contract Administrator for the use of material from any other source. If other operators are using, or desire to use the rock source(s), a joint operating plan must be developed. All parties shall follow this plan. Purchaser shall notify the Contract Administrator a minimum of 3 calendar days before starting any operations in the listed locations.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
Five Forks Quarry	SE ¼ NE ¼ Sec. 22, T18N, R04W	4 Inch In Place, Select Pit Run, Quarry Spalls.

Porter Pass Quarry	SE ¼ SW ¼ of Sec. 30 T18N, R04W	2 ½ Inch Crushed, Select Pit Run, Quarry Spalls
Stinkfoot Quarry	NE ¼ NE ¼ Sec. 28, T18N, R04W	2 ½ Inch Crushed, 4 inch Jaw, Select Pit Run, Quarry Spalls

6-3 ROCK SOURCE STATE LAND, EXISTING STOCKPILE

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following existing stockpile(s) on state land at no charge to the Purchaser. Purchaser shall not remove additional yardage without prior written approval from the Contract Administrator.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>	<u>Quantity</u>
Porter Pass Quarry	Main Quarry Floor	2 ½ Inch Crushed	920 CY
Porter Pass Quarry	Main Quarry Floor	4 Inch Jaw	500 CY
Stinkfoot Quarry	See Pit Plan	2 ½ Inch Crushed	420 CY

6-5 ROCK FROM COMMERCIAL SOURCE

Rock used in accordance with the quantities on the ROCK LIST may be obtained from any commercial source at the Purchaser's expense. Rock sources are subject to written approval by the Contract Administrator before their use.

SUBSECTION ROCK SOURCE DEVELOPMENT

6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

Purchaser shall conduct rock source development and use at the following sources, in accordance with the written ROCK SOURCE DEVELOPMENT PLAN prepared by the state and included in this road plan. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator. Purchaser shall notify the Contract Administrator a minimum of 3 calendar days before starting any operations in the rock source.

<u>Source</u>	<u>Location</u>
Stinkfoot Quarry	NE ¼ NE ¼ Sec. 28, T18N, R04W
Five Forks Quarry	SE ¼ NE ¼ Sec. 22, T18N, R04W

6-12 ROCK SOURCE SPECIFICATIONS

Rock sources must be in accordance with the following specifications, unless otherwise specified in the ROCK SOURCE DEVELOPMENT PLAN:

- Pit walls may not be undermined or over steepened. The maximum slope of the walls must be consistent with recognized engineering standards for the type of material being excavated in accordance with the following table:

Material	Maximum Slope Ratio (Horiz. :Vert.)	Maximum Slope Percent
Sand	2:1	50
Gravel	1.5:1	67
Common Earth	1:1	100
Fractured Rock	0.5:1	200
Solid Rock	0:1	vertical

- Pit walls must be maintained in a condition to minimize the possibility of the walls sliding or failing.
- The width of pit benches must be a minimum of 1.5 times the maximum length of the largest machine used.
- The surface of pit floors and benches must be uniform and free-draining at a minimum 2% outslope gradient.
- All operations must be carried out in compliance with all regulations of the Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration and Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.
- All vehicle access to the top of the pit faces must be blocked at the end of operations.

6-14 DRILL AND SHOOT

Rock drilling and shooting must meet the following specifications:

- Oversize material remaining in the rock source at the conclusion of the timber sale may not exceed 200 cubic yards.
- Oversize material is defined as rock fragments larger than two feet in any dimension.
- Oversized rock that exceeds the maximum allowable amount must be reduced to a smaller size within the rock source.
- Purchaser shall notify the Contract Administrator a minimum of 3 working days before blasting operations.
- Purchaser shall submit an informational drilling and shooting plan to the Contract Administrator 3 working days before any drilling. The drilling and shooting plan must include, at a minimum, the mapped location and spacing of all holes to be loaded, the type of blasting agent used, the powder factor calculated and the units of same, stem amount held per hole. After drilling, the type of rock encountered while drilling e.g. hard black, soft brown, etc. shall be amended to submitted plan.
- All operations must be carried out in compliance with the Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration and the Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.
- Purchaser shall block access roads before blasting operations.

SUBSECTION ROCK MANUFACTURE

6-20 ROCK CRUSHING OPERATIONS

Rock crushing operations must conform to the following specifications:

- Operations and placement of oversize material must be conducted in or near the rock source site, as approved in writing by the Contract Administrator.
- The crushing operation must be concluded within 30 working days from the time it begins.

6-23 ROCK GRADATION TYPES

Purchaser shall manufacture rock in accordance with the types and amounts listed in the ROCK LIST. Rock must meet the following specifications for gradation and uniform quality when placed in hauling vehicles. Purchaser shall provide a sieve analysis upon request from the Contract Administrator.

SUBSECTION ROCK GRADATIONS

6-32 2 ½-INCH MINUS CRUSHED ROCK

% Passing 2 ½" square sieve	100%
% Passing 2" square sieve	65 - 95%
% Passing 1" square sieve	50 – 80%
% Passing U.S. #4 sieve	30 – 50%
% Passing U.S. #40 sieve	16% maximum
% Passing U.S. #200 sieve	8% maximum

6-37 4-INCH JAW RUN ROCK

% Passing 4" square sieve	95%
% Passing U.S. #40 sieve	16% maximum
% Passing U.S. #200 sieve	5% maximum

The portion of aggregate retained on the No. 4 sieve may not contain more than 0.2 percent organic debris and trash. All percentages are by weight.

6-38 4-INCH IN-PLACE ROCK

4-inch in-place rock must have a minimum of 90 percent of the top 4 inches of the running surface pass a 4-inch square opening.

In-place rock may not contain more than 5 percent by weight of organic debris and trash. No more than 50 percent of rock may be larger than 8 inches in any dimension and no rock may be larger than 12 inches in any dimension.

6-41 SELECT PIT RUN ROCK

No more than 50 percent of the rock may be larger than 6 inches in any dimension and no rock may be larger than 10 inches in any dimension. Pit Run rock may not contain more than 5 percent by weight of organic debris, and trash. Rock may require processing to meet this specification.

6-43 QUARRY SPALLS

% Passing 8" square sieve	100%
% Passing 3" square sieve	40% maximum

% Passing 3/4" square sieve 10% maximum

Rock may not contain more than 5 percent vegetative debris or trash. All percentages are by weight.

SUBSECTION ROCK MEASUREMENT

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

Measurement of specified rock depths, are defined as the compacted depth(s) using the compaction methods required in this road plan. Estimated quantities specified in the ROCK LIST are compacted yards. Purchaser shall apply adequate amounts of rock to meet the specified rock depths. Specified rock depths are minimum requirements and are not subject to reduction.

SUBSECTION ROCK APPLICATION

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for subgrade including: ditches, headwalls, catch basins, culverts, energy dissipaters, ditch-outs, subgrade shaping and compacting before rock application.

6-71 ROCK APPLICATION

Purchaser shall apply rock in accordance with the specifications and quantities shown on the ROCK LIST. Rock must be spread, shaped, and compacted full width concurrent with rock hauling operations. The Contract Administrator will direct locations for rock that is to be applied as spot patching. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width.

6-73 ROCK FOR WIDENED PORTIONS

Purchaser shall apply rock to turnarounds, turnouts, and areas with curve widening to the same depth and specifications as the traveled way.

6-75 OPTIONAL ROCK EXCEPTION

On the following roads, if hauling takes place from May 1 to October 31 the Purchaser may place less rock than shown on the ROCK LIST, as approved in writing by the Contract Administrator. If less rock is applied, the Purchaser shall submit a written plan, for approval, describing how these roads shall be constructed, used, maintained, and treated post-haul. The Purchaser shall meet post-haul specifications in Section 9 POST-HAUL ROAD WORK, or other conditions of the approved plan as required by the Contract Administrator.

<u>Road</u>	<u>Stations</u>
B-7212	0+00 to 4+21
KC-0123	5+38 to 13+57
KC-0127	0+00 to 2+94
KC-0128	0+00 to 12+77
SR8-1	0+00 to 6+25

SECTION 7 – STRUCTURES

SUBSECTION SIGNS

7-1 SIGN INSTALLATION

Purchaser shall purchase, install, and maintain the following road signs. Signs must comply with the Federal Highway Administration's Manual on Uniform Traffic Control Devices.

<u>Road</u>	<u>Location</u>	<u>Sign</u>	<u>Comments</u>
State Route 8	Eastbound lanes before SR8-1 road approach.	Cautionary signage warning of truck traffic and logging operations	Sign installation must comply with the DOT access permit no. 60807

SUBSECTION STREAM CROSSING STRUCTURES GENERAL

7-5 STRUCTURE DEBRIS

Purchaser shall not allow debris from the installation or removal of structures to enter any stream. Purchaser shall maintain a clean jobsite, with all materials stored away from the high water mark or other area presenting a risk of the materials entering a stream. Debris entering any stream must be removed immediately, and placed in the site(s) designated for stockpiling or disposal, unless otherwise stated in the Insert design or specification sheet. Purchaser shall retrieve all material carried downstream from the jobsite.

SECTION 8 – EROSION CONTROL

8-1 SEDIMENT CONTROL STRUCTURES

Sediment control shall be accomplished using sediment traps, silt fences, rock berms, settling ponds or other methods as approved, in writing, by the Contract Administrator.

8-2 PROTECTION FOR EXPOSED SOIL

On the following road(s), Purchaser shall provide and evenly spread a layer of straw to all exposed soils that have potential to deliver to typed water.

<u>Road</u>	<u>Location</u>
KC-0123	5+38 to 13+57
KC-0128	4+87 to 12+77

8-15 REVEGETATION

On the following road(s), Purchaser shall spread grass seed on all exposed soils resulting from road work activities.

<u>Road</u>	<u>Location</u>
KC-0123	5+38 to 13+57
KC-0128	4+87 to 12+77

8-17 REVEGETATION TIMING

On the following roads, Purchaser shall revegetate immediately following the completion of the activity listed below. Soils may not be allowed to sit exposed for longer than one week without receiving revegetation treatment unless otherwise approved in writing by the Contract Administrator.

<u>Road</u>	<u>Revegetation Type</u>	<u>Comments</u>
KC-0123	Grass Seed	Revegetate as abandoned
KC-0128	Grass Seed	Revegetate as abandoned

8-25 GRASS SEED

Purchaser shall evenly spread the seed mixture listed below on all exposed soil at a rate of 50 pounds per acre of exposed soil. Grass seed must meet the following specifications:

1. Weed seed may not exceed 0.5% by weight.
2. All seed species must have a minimum 90% germination rate, unless otherwise specified.
3. Seed must be certified.
4. Seed must be furnished in standard containers showing the following information:
 - a. Common name of seed
 - b. Net weight
 - c. Percent of purity
 - d. Percentage of germination
 - e. Percentage of weed seed and inert material
5. Seed must conform to the following mixture unless a comparable mix is approved in writing by the Contract Administrator.

<u>Kind and Variety of Seed in Mixture</u>	<u>% by Weight</u>
Perennial Rye	35-45
Red Fescue	30-40
Highland Bent	5-15
White Clover	10-20
Inert and Other Crop	0.5

SECTION 9 – POST-HAUL ROAD WORK

SUBSECTION STRUCTURES

9-1 BARRICADES

Purchaser shall construct barricades in accordance with the BARRICADE DETAIL.

<u>Road</u>	<u>Stations</u>
B-7212	0+50
KC-0123	5+38
KC-0127	0+50
KC-0128	4+87
SR8-1	1+50

9-2 CULVERT REMOVAL FROM LIVE STREAM

On the following road(s), Purchaser shall remove existing culverts and puncheons from live streams and leave the resulting channel open with excavation slope and excavated channel width as specified.

<u>Road</u>	<u>Stations</u>	<u>Excavated Channel Width</u>	<u>Slope Ratio</u>	<u>Comments</u>
KC-0123	10+77	4'	1½:1	See attached design
KC-0128	5+49	3'	1½:1	Match natural valley wall slope
KC-0128	6+83	1.5'	1½:1	Match natural valley wall slope
KC-0128	9+51	2'	1½:1	Match natural valley wall slope

9-3 CULVERT MATERIAL REMOVED FROM STATE LAND

Culverts removed from roads become the property of the Purchaser and must be removed from state land.

9-5 POST-HAUL MAINTENANCE

Purchaser shall perform post-haul maintenance in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

SUBSECTION POST-HAUL LANDING MAINTENANCE

9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface.

SUBSECTION DECOMMISSIONING AND ABANDONMENT

9-21 ROAD ABANDONMENT

If constructed/reconstructed, Purchaser shall abandon the following roads before the termination of this contract.

<u>Road</u>	<u>Stations</u>
B-7212	0+00 to 4+21
KC-0123	5+38 to 13+57
KC-0127	0+00 to 2+94
KC-0128	4+87 to 12+77
SR8-1	0+00 to 6+25

9-22 ABANDONMENT

- Remove road shoulder berms except as directed.
- Construct non-drivable waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical drop of no more than 10 feet between waterbars or between natural drainage paths and with a maximum spacing of 100 feet, or as marked in the field.
- Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 per cent grade.

- Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
- Remove temporary type F crossing on KC-0123 road, see attached design information.
- Remove ditch cross drain culverts and leave the resulting trench open.
- Remove used culvert material from State Land.
- Seed all exposed soil concurrently with abandonment per clause 8-15 REVEGETATION.
- Construct earth barricade as per clause 9-1 BARRICADES

SECTION 10 MATERIALS

SUBSECTION CULVERTS

10-17 CORRUGATED PLASTIC CULVERT

Polyethylene culverts must meet AASHTO M-294 specifications, or ASTM F-2648 specifications for recycled polyethylene. Culvert segments not specifically labeled as downspouts must be Type S – double walled with a corrugated exterior and smooth interior.

10-22 PLASTIC BAND

Plastic coupling and end bands must meet the AASHTO specification designated for the culvert. Only fittings supplied or recommended by the culvert manufacturer may be used. Couplings must be split coupling band. Split coupling bands must have a minimum of four corrugations, two on each side of the pipe joint.

SECTION 11 SPECIAL NOTES

11-1 ENGINEERED FILL MATERIAL

Fill material for following road may include corduroy logs placed parallel with the pipe. This material will act as temporary fill and shall have a minimum of 2 feet of cover. The cover shall consist of native material and rock per the ROCK LIST.

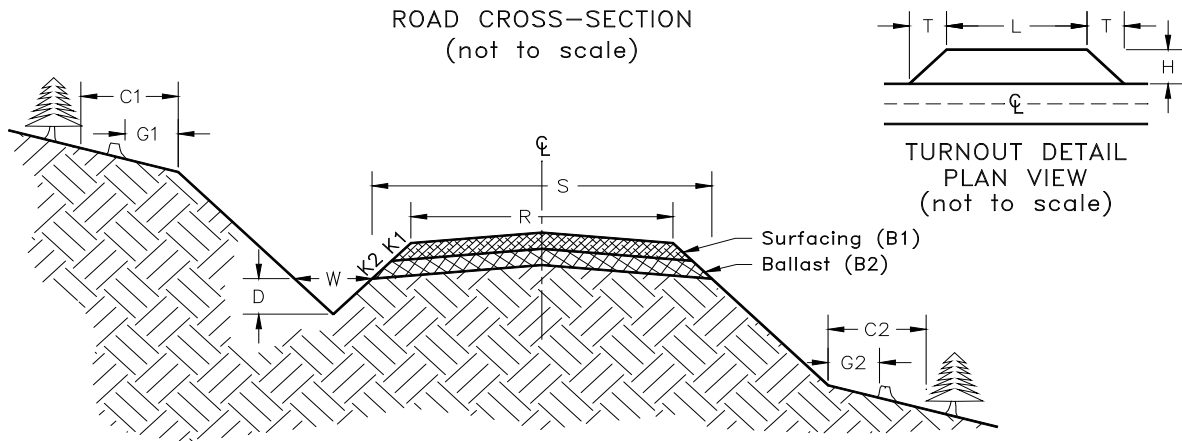
<u>Road</u>	<u>Station</u>
KC-0123	10+77

11-22 WORK NOTIFICATIONS

On the following road(s), Purchaser shall notify WSDOT a minimum of 2 weeks before work begins for each work window per DOT Access Permit ACP-60807.

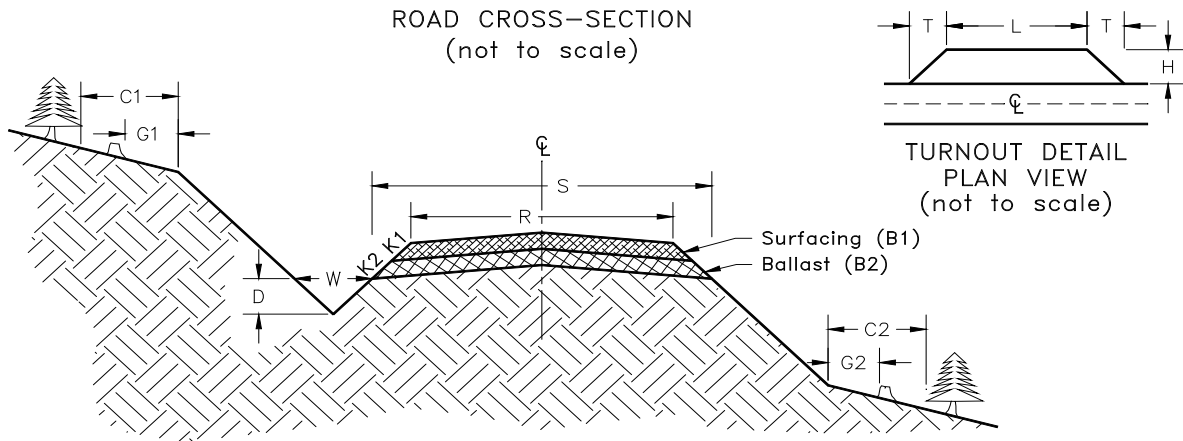
<u>Road</u>	<u>Contact</u>	<u>Contact Information</u>
SR8-1	Brent Schiller Superintendent	Email: SchillB@wsdot.wa.gov Cell: 253-307-3293 Office: 360-538-8532

TYPICAL SECTION SHEET (pg 1 of 2)



Road Number	From Station	To Station	Tolerance Class	Subgrade Width (feet)	Road Width (feet)	Ditch		Crown in. @ CL	Grubbing Limits (feet)		Clearing Limits (feet)		Cut Slope Ratio	Fill Slope Ratio
						Width (feet)	Depth (feet)		G1	G2	C1	C2		
				S	R	W	D						Clause	Clause
B-line	543+00	685+10	A		16	3	1	4	-	-	-	-	4-5	4-6
B-5000	0+00	125+50	B		14	3	1	4	-	-	-	-	4-5	4-6
B-5300	0+00	7+53	C		12	3	1	4	-	-	-	-	4-5	4-6
B-6000	0+00	68+00	B		14	3	1	4	-	-	-	-	4-5	4-6
B-6008	0+00	2+18	C	16	12	3	1	4	3	3	5	5	4-5	4-6
B-7000	0+00	82+10	B		14	3	1	4	-	-	-	-	4-5	4-6
B-7028	0+00	0+87	C	16	12	3	1	4	0	0	0	0	4-5	4-6
B-7200	0+00	20+14	C		12	3	1	4	-	-	-	-	4-5	4-6
B-7200Ext	0+00	0+85	C	16	12	3	1	4	3	3	5	5	4-5	4-6
B-7210	0+00	6+60	C	16	12	3	1	4	3	3	5	5	4-5	4-6
B-7212	0+00	4+21	C	16	12	3	1	4	3	3	5	5	4-5	4-6
KC-Line	0+00	192+30	A		16	3	1	4	-	-	-	-	4-5	4-6
KC-0100	0+00	19+10	C		14	3	1	4	-	-	-	-	4-5	4-6
KC-0120	0+00	27+77	C		12	3	1	4	-	-	-	-	4-5	4-6
KC-0123	0+00	5+20	C	16	12	3	1	4	3	3	TAGS	TAGS	4-5	4-6
KC-0123	5+21	7+20	C	16	12	3	1	4	0	0	0	0	4-5	4-6
KC-0123	7+21	11+50	C	16	12	3	1	4	3	3	TAGS	TAGS	4-5	4-6
KC-0123	11+51	13+57	C	16	12	3	1	4	0	0	0	0	4-5	4-6
KC-0127	0+00	2+94	C	16	12	3	1	4	0	0	0	0	4-5	4-6
KC-0128	0+00	4+55	C	16	12	3	1	4	3	3	5	5	4-5	4-6

TYPICAL SECTION SHEET (pg 2 of 2)



Road Number	From Station	To Station	Tolerance Class	Subgrade Width (feet)	Road Width (feet)	Ditch		Crown in. @ CL	Grubbing Limits (feet)		Clearing Limits (feet)		Cut Slope Ratio	Fill Slope Ratio
						Width (feet)	Depth (feet)		G1	G2	C1	C2		
				S	R	W	D						Clause	Clause
KC-0128	4+56	6+83	C	16	12	3	1	4	0	0	TAGS	TAGS	4-5	4-6
KC-0128	6+84	12+77	C	16	12	3	1	4	0	0	0	0	4-5	4-6
KC-6500	0+00	16+75	C		12	3	1	4	-	-	-	-	4-5	4-6
SR8-1	0+00	6+25	C	16	12	3	1	4	0	0	0	0	4-5	4-6

ROCK LIST

BALLAST

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth (inches)	C.Y./ Station	# of Stations	C.Y. Subtotal	Rock Source	Comments		
			K2	B2	4 Inch Jaw				CW	TO	TA
B-7200Ext	0+00	0+85	1 ½ :1	12	56	.85	48	Porter Pass Quarry or Commercial Source	4 Inch In place may be used if 4 Inch Jaw Stockpile runs out		
B-7210	0+00	6+60	1 ½ :1	12	56	6.60	370				
B-7212*	0+00	4+21	1 ½ :1	12	56	4.21	236				
KC-0123	0+00	5+38	1 ½ :1	18	76	5.38	409	Stinkfoot Quarry, or Commercial Source			
KC-0123*	5+38	13+57	1 ½ :1	18	76	8.19	623				
KC-0127*	0+00	2+94	1 ½ :1	12	56	2.94	165				
KC-0128*	0+00	12+77	1 ½ :1	16	69	12.77	882				
SR8-1*	0+00	6+25	1 ½ :1	12	56	6+25	350				
					4 Inch In-Place						
B-6008	0+00	2.18	1 ½ :1	12	56	2.18	123	Five Forks Quarry, Porter Pass Quarry or Commercial Source			
Landing Rock*							750		Select Pit Run may be used in place of 4 inch Jaw.		
					Quarry Spalls						
Culvert Headwalls and Dissapaters							163	Any Source	See CULVERT AND DRAINAGE LIST		

4 Inch Jaw Total__3,083__Cubic Yards
 Quarry Spalls Total__163__Cubic Yards
 Select Pit Run/4 Inch In Place__873__Cubic Yards
 Ballast Total__4,119__Cubic Yards

Included in C.Y. Subtotal

CW – Curve Widening

TO – Turn Out

TA – Turn Around

*Optional Rock: If Purchaser elects to haul on optional rock roads in wet weather, the depth listed above is recommended but not required.

SURFACE

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth (inches)	C.Y. Station	# of Stations	C.Y. Subtotal	Rock Source	Comments		
			K1	B1	2 ½ Inch Crushed				CW	TO	TA
B-7000	22+00	60+00	1 ½ :1	6	24	38.00	912	Porter Pass Quarry Stockpile			
KC-0100	0+00	10+00	1 ½ :1	6	24	10.00	240	Stinkfoot Quarry Stockpile			
KC-0120	0+00	1+00	1 ½ :1	-	-	1	60				
KC-0120	12+00	17+00	1 ½ :1	6	24	5.00	120				

2 Inch Minus Crushed Total 1,332 Cubic Yards
Surface Total 1,332 Cubic Yards

NOTE: Yardages are estimated on a compacted (In-Place) basis. Compliance of required rock will be based on compacted depth measurement. **Apply appropriate factors to determine loose amounts for estimating purposes.** Roads and rock quantities are designed for dry weather use. If Purchaser elects to haul in wet weather additional rock may be obtained from the rock pits listed in Section 6 at the Purchaser's expense and with prior written approval from the Contract Administrator.

COMPACTION LIST

Road	From Station	To Station	Type	Max Depth of Lift (inches)	Equipment Type	Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
All new rock for pre-haul/post-haul maintenance			Pre/Post-haul rock	6	Smooth Drum Vibratory Roller	14,000	2 low freq. vibe on	3.5
All new construction and reconstruction			Subgrade, rock	12, 6	Smooth Drum Vibratory Roller	14,000	2 low freq. vibe on	3.5
All pre-haul maintenance roads			After pre-haul grading	6	Smooth Drum Vibratory Roller	14,000	2 low freq. vibe on	3.5

CULVERT AND DRAINAGE LIST, pg 1 of 1

Road Number	Location	Culvert		Length (ft)			Riprap (C.Y.)			Backfill Material*	Placement Method*	Const. Staked *	Remarks
		Dia. (in)	Type	Culvert	Downspt	Flume	Inlet	Outlet	Type				
B-6000	19+45	-	-	-	-	-	0	10	QS	NT			Remove Flume Add Dissipators
	24+00	24	PD	50	-	-	2	43	QS	NT			Replace Stream Culvert 40 CY Bank Armor
B-7210	3+70	18	PD	30	-	-	1	1.5	QS	NT			Install Cross Drain
	6+60	18	PD	30	-	-	1	1.5	QS	NT			Install Cross Drain
B-7212	2+66	18	PD	30	-	-	1	1.5	QS	NT			Install Cross Drain
KC-0100	2+50	18	PD	40	-	-	1	1.5	QS	NT			Replace Cross Drain
KC-0123	3+46	18	PD	30	-	-	1	1.5	QS	NT			Install Cross Drain
	7+12	18	TEMP	30	-	-	1	1.5	QS	NT			Install Cross Drain
	10+16	18	TEMP	30	-	-	1	1.5	QS	NT			Install Cross Drain
	10+77	36	TEMP	40	-	-	0	0	QS	NT			Install Temp Fish Culvert
KC-0128	1+73	18	PD	30	-	-	1	1.5	QS	NT			Install Cross Drain
	3+44	18	PD	30	-	-	1	1.5	QS	NT			Install Cross Drain
	5+49	36	TEMP	40	-	-	2	3	QS	NT			Install Stream Culvert
	6+83	24	TEMP	40	-	-	2	3	QS	NT			Install Stream Culvert
	7+51	18	TEMP	40	-	-	1	1.5	QS	NT			Install Cross Drain
	9+51	18	TEMP	30	-	-	2	3	QS	NT			Install Stream Culvert
SR8-1	2+56	18	TEMP	30	-	-	1	1.5	QS	NT			Install Cross Drain
	4+93	24	TEMP	30	-	-	2	3	QS	NT			Install Stream Culvert
As Directed by C.A.		18	PD	30	-	-	1	1.5	QS	NT			Contingency
		18	PD	30	-	-	1	1.5	QS	NT			Contingency
		18	PD	30	-	-	1	1.5	QS	NT			Contingency
		18	PD	BAND	-	-							Contingency
		18	PD	BAND	-	-							Contingency

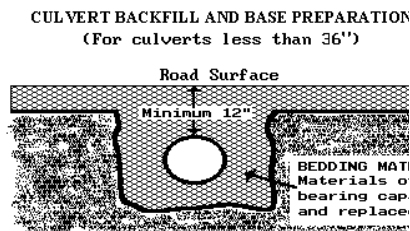
* SEE CULVERT AND DRAINAGE SPECIFICATION DETAIL

PD = Polyethylene Pipe Dual Wall AASHTO No. M294 Type S or ASTM F2648

TEMP = Temporary Culvert

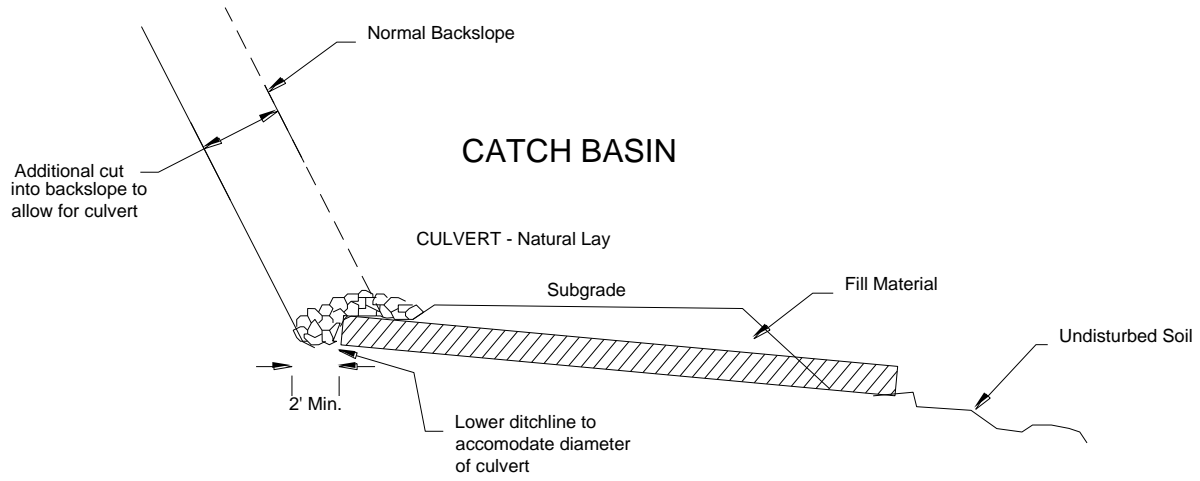
Key:

- QS - Quarry Spalls
- LL - Light Loose Riprap
- SR - Shot Crushed Rock
- NT - Native (bank run)
- SL - Select Fill
- Flume - Half round pipe
- Downsput - Full round pipe

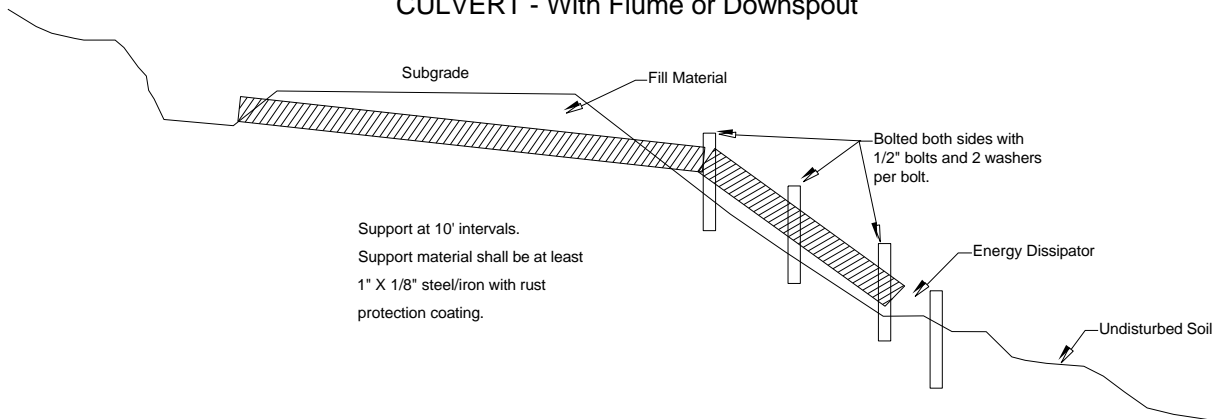


CULVERT AND DRAINAGE SPECIFICATION DETAIL

(Page 1 of 3)



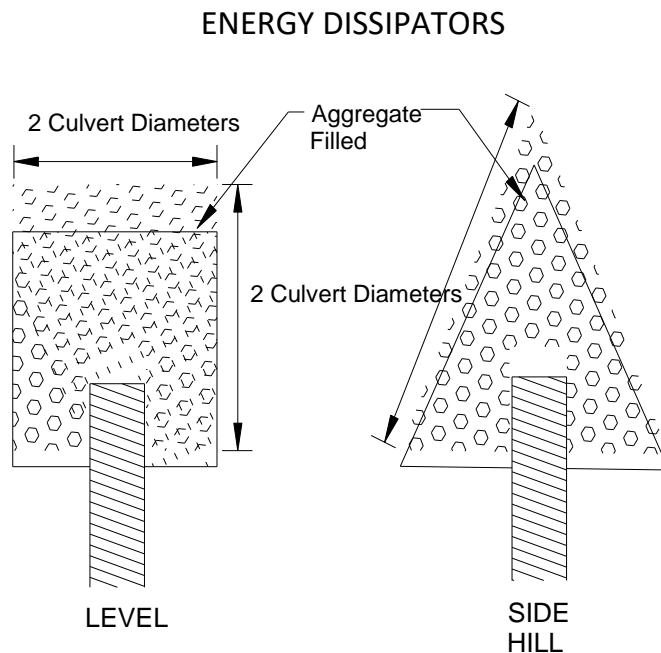
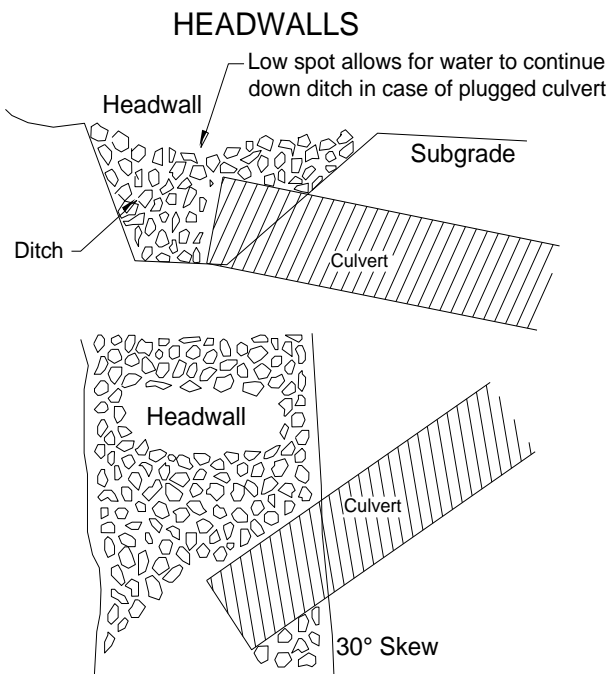
CULVERT - With Flume or Downspout



CULVERT AND DRAINAGE SPECIFICATION DETAIL

(Page 2 of 3)

Proper preparation of foundation and placement of bedding material shall precede the installation of all culvert pipe. This includes necessary leveling of the native trench bottom and compaction of required bedding material to form a uniform dense unyielding base. The backfill material shall be placed so that the pipe is uniformly supported along the barrel.



Headwalls to be constructed of material that will resist erosion.

Dissipator Specifications:
Depth: 1 culvert diameter
Aggregate: as specified in the CULVERT LIST.

CULVERT AND DRAINAGE SPECIFICATION DETAIL

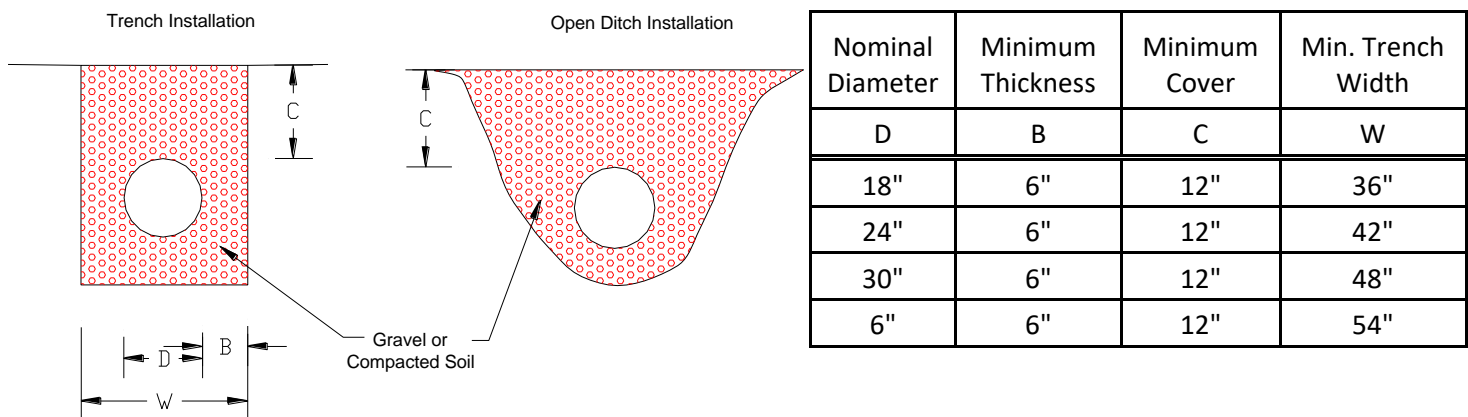
(Page 3 of 3)

POLYETHYLENE PIPE INSTALLATION

INSTALLATION REQUIREMENTS:

1. Crushed stone, gravel, or compacted soil backfill material shall be used as the bedding and envelope material around the culvert. The aggregate size shall not exceed 1/6 pipe diameter or 4" diameter, whichever is smaller.
2. The corrugated pipe shall be laid on grade, on a layer of bedding material as shown for the two types of installations. If native soil is used as the bedding and backfill material, it shall be well compacted in six inch layers under the haunches, around the sides and above the pipe to the recommended minimum height of cover.
3. Either crushed aggregate or flexible (asphalt) pavement may be laid as part of the minimum cover requirements.
4. Site conditions and availability of bedding materials often dictate the type of installation method used.
5. The load bearing capability of flexible conduits is dependent on the type of backfill material used and the degree of compaction achieved. Crushed stone and gravel backfill materials typically reach a compaction level of 90-95% AASHTO standard density without compaction. When native soils are used as backfill material, a compaction level of 85% is required. This minimum compaction can be achieved by either hand or mechanical tamping.

MINIMUM DIMENSIONS Trench or Open Ditch Installation



FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

(Sheet 1 of 2)

Cuts and Fills

- Maintain slope lines to a stable gradient compatible with the cut slope/fill slope ratios. Remove slides up to 100 cubic yards in volume from ditches and the roadway. Repair fill-failures with selected material or material approved by the Contract Administrator. Remove overhanging material from the top of cut slopes.
- Waste material from slides or other sources shall be placed and compacted in stable locations identified in the road plan or approved by the Contract Administrator, so that sediment will not deliver to any streams or wetlands.
- Slide material and debris shall not be mixed into the road surface materials, unless approved by the Contract Administrator.

Surface

- Shape the road surface, turnouts, and shoulders to the original shape on the TYPICAL SECTION SHEET to provide a smooth, rut-free traveled surface and maintain surface water runoff in an even, unconcentrated manner.
- Blading shall not undercut the backslope or cut into geotextile fabric on the road.
- If required by the Contract Administrator, water shall be applied as necessary to control dust and retain fine surface rock.
- Surface material shall not be bladed off the roadway. Replace surface material when lost or worn away.
- Remove shoulder berms, created by grading, to facilitate drainage, except as marked or directed by the Contract Administrator.
- For roads with geotextile fabric: spread surface aggregate to fill in soft spots and wheel ruts (barrel spread) to prevent damage to the geotextile fabric.

Drainage

- Prevent silt bearing road surface and ditch runoff from delivering sediment to any streams or wetlands.
- Maintain rolling dips and drivable waterbars as needed to keep them functioning as intended.
- Maintain headwalls to the road shoulder level with material that will resist erosion.
- Maintain energy dissipaters at culvert outlets with non-erodible material or rock.
- Keep ditches, culverts, and other drainage structures clear of obstructions and functioning as intended.
- Inspect and clean culverts at least monthly, with additional inspections during storms and periods of high runoff. This shall be done even during periods of inactivity.

Preventative Maintenance

- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

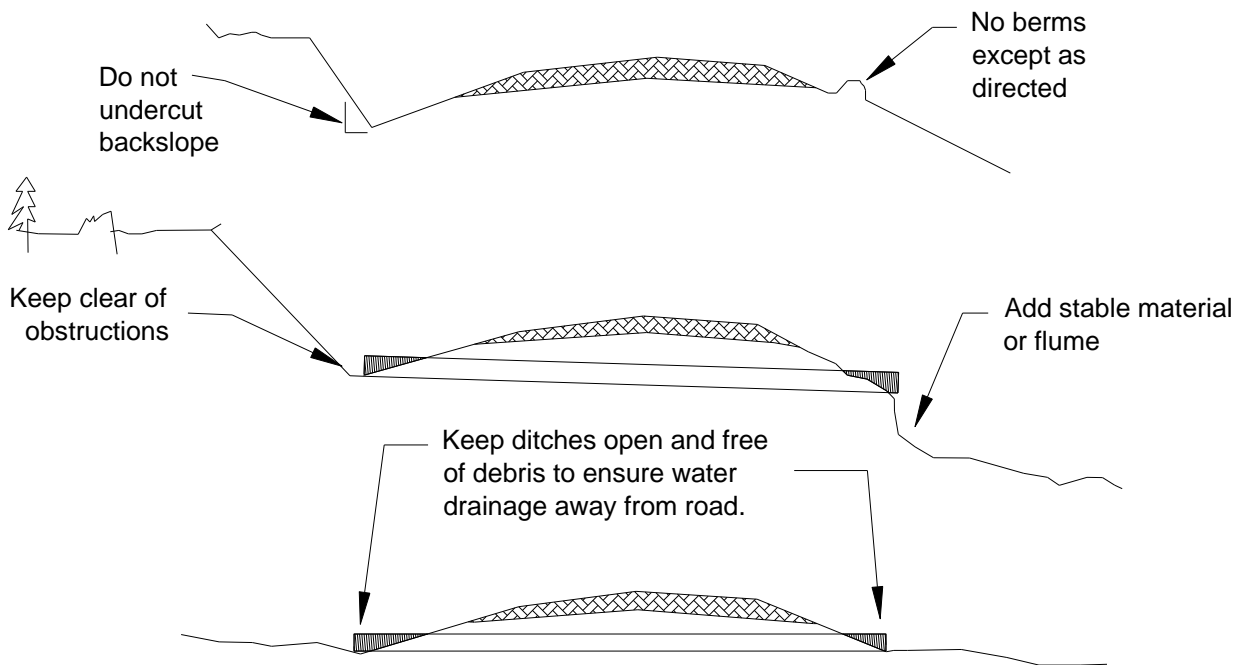
FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS (Sheet 2 of 2)

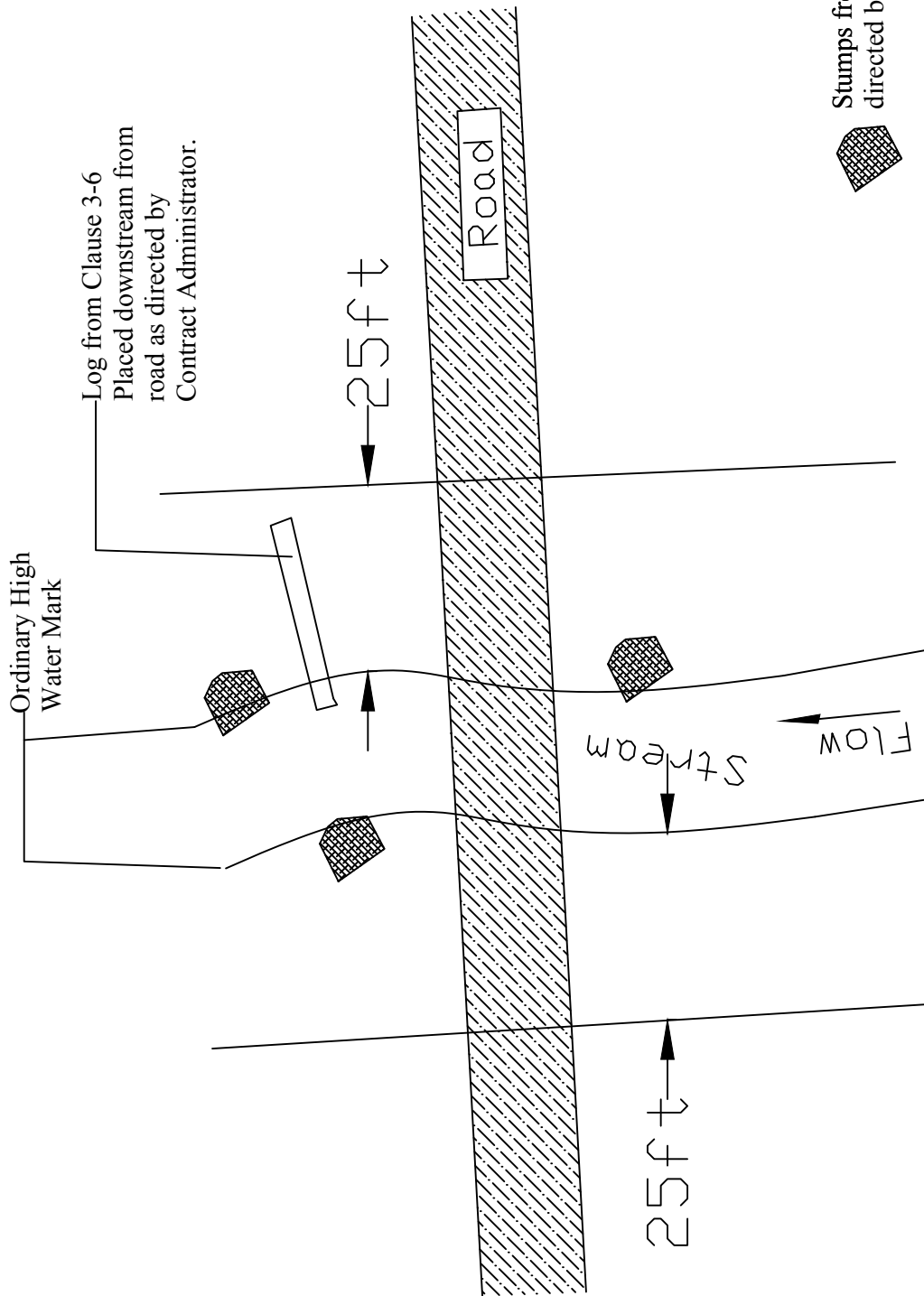
Termination of Use or End of Season

- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.





Stumps from Clause 3-11 placed as directed by CA



Typical Riparian Strategy Stream Crossing Detail
Crush Timber Sale



WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

INSTALLATION PLAN NOTES

SEDIMENT TRAPS TO BE CONSTRUCTED IN BOTH DITCH LINES EAST OF CROSSING TO CATCH WATER COMING FROM THROUGH-CUT

REMOVAL PLAN NOTES

CONSTRUCT WATERBARS EAST AND WEST OF STREAM CROSSING TO DIVERT WATER FROM REMOVAL AREA

SEED AND STRAW EXPOSED SOIL CONCURRENTLY WITH ABANDONMENT SEE ROAD PLAN SECTION 8

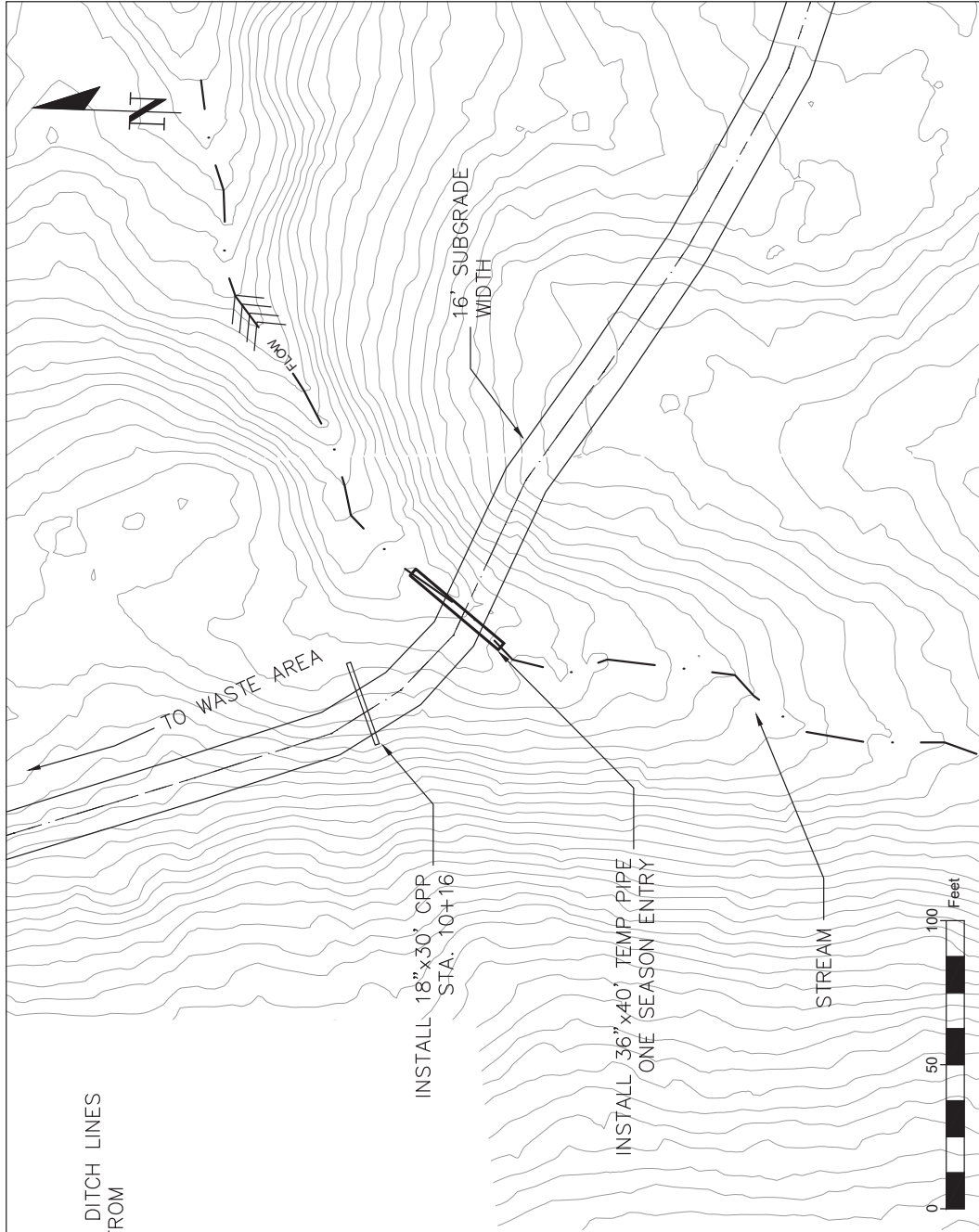
SEE FOREST PRACTICE ACTIVITY MAP FOR WASTE AREA LOCATION

USED EXCAVATED MATERIAL MAY BE WASTED ON ROAD GRADE 50' MINIMUM FROM STREAM

1 SITE PLAN

Scale: 1:40

- LEGEND**
- PROPOSED ROAD EDGE
 - STREAM THAWEG
 - PROPOSED ROAD CENTER LINE



CRUSH TIMBER SALE
AGREEMENT NO. 30-100998
Drawn By: J. Gross
Designed By: J. Gross



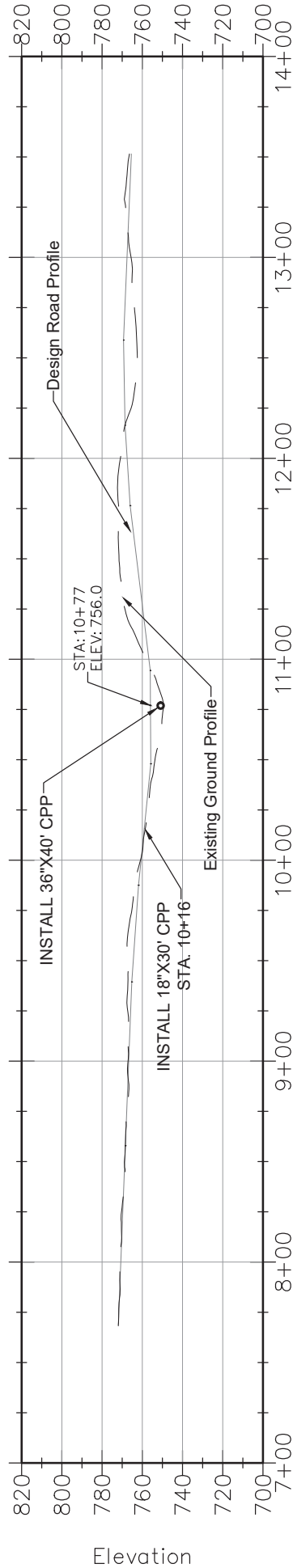
WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

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KC-0123 TEMP FISH CROSSING

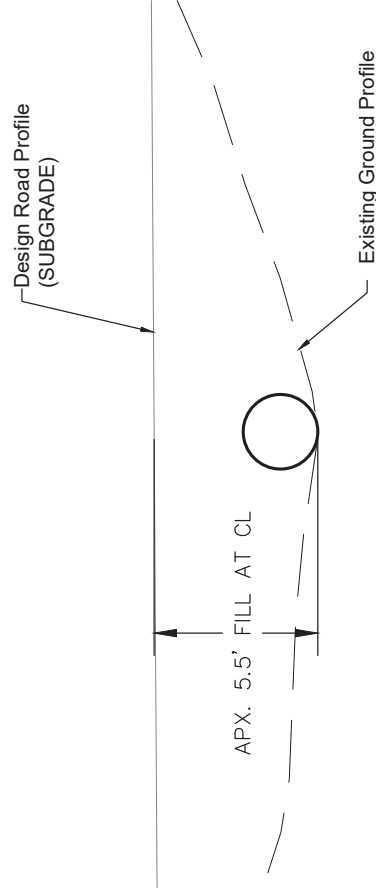
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LAT & LONG: N47.036 W123.143
DATE: 5/1/2021

SHEET
1
OF
3

ROAD PROFILE



CROSSING PROFILE DETAIL



GENERAL NOTES:

1. EXCAVATE AT LEAST ONE FOOT PARALLEL TO PIPE BEFORE COMPACTING
2. SEE ROAD PLAN SECTION 11-1 FOR FILL MATERIAL NOTES
3. COMPACT FILL IN A MINIMUM OF 2' LIFTS

DRAWINGS NOT TO SCALE

PROFILE LOOKING DOWNSTREAM

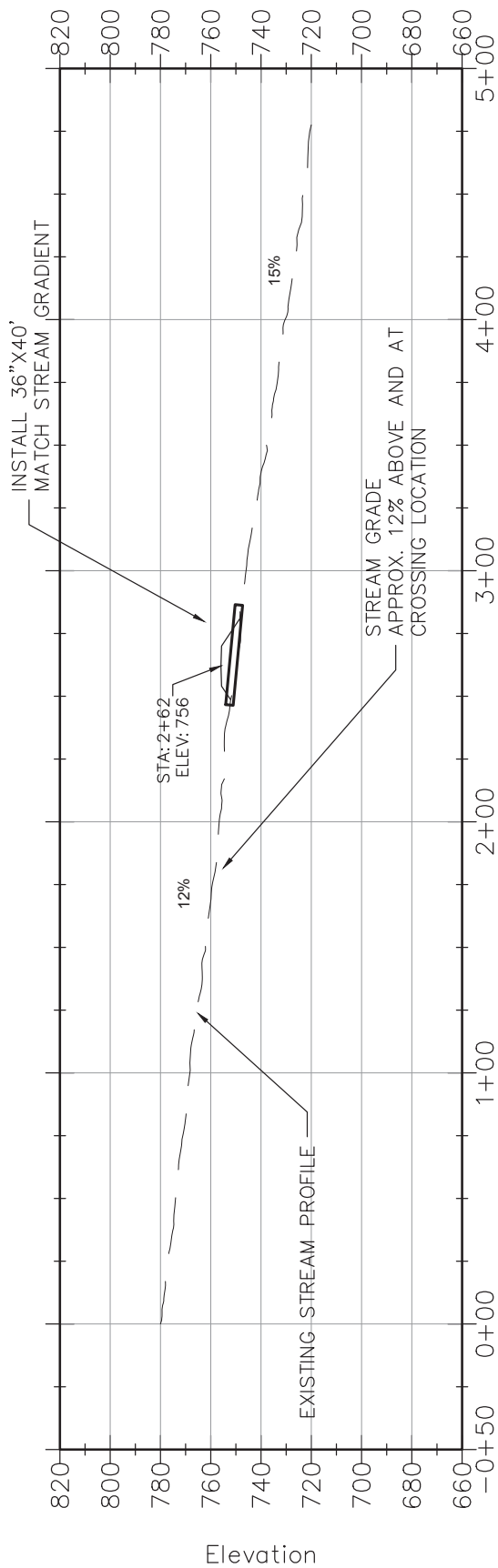
CRUSH TIMBER SALE
 AGREEMENT NO. 30-100998
 Drawn By: J. Gross
 Designed By: J. Gross



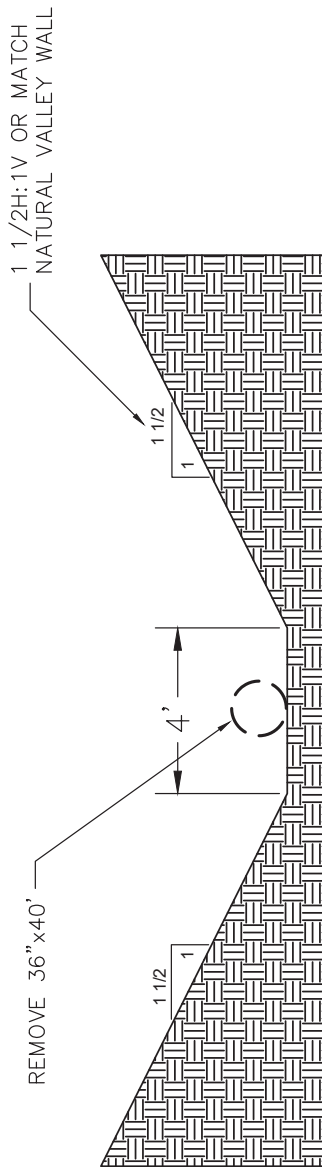
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 DETAIL
 KC-0123 TEMP CROSSING

SEC. TOWNSHIP RANGE: SEC. 23 T18N R4W
 LAT & LONG: N47.036 W123.143
 DATE: 5/1/2021

SHEET
 2
 OF
 3



CHANNEL PROFILE



FINAL CHANNEL AND ROAD ABANDONMENT SECTION

DRAWINGS NOT TO SCALE

SHEET
3
OF
3

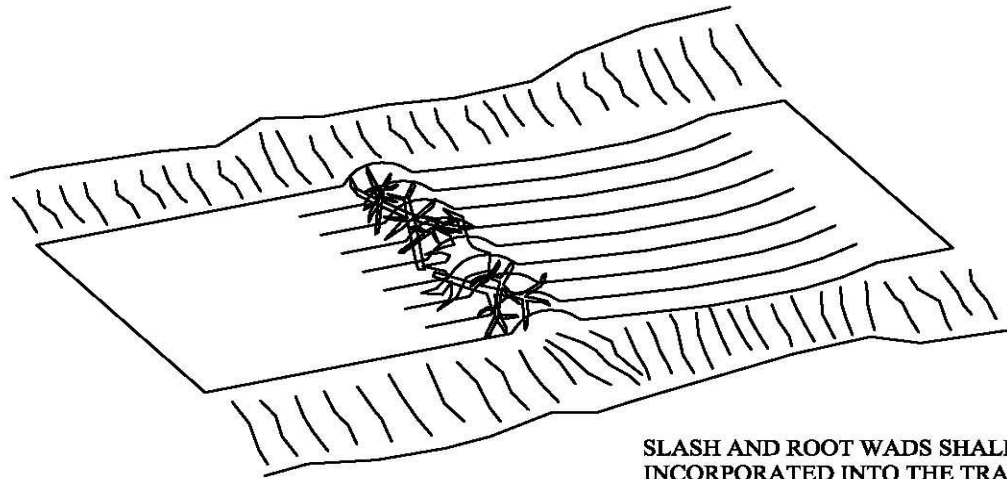
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ABANDONMENT SECTION
KC-0123 TEMP CROSSING

WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

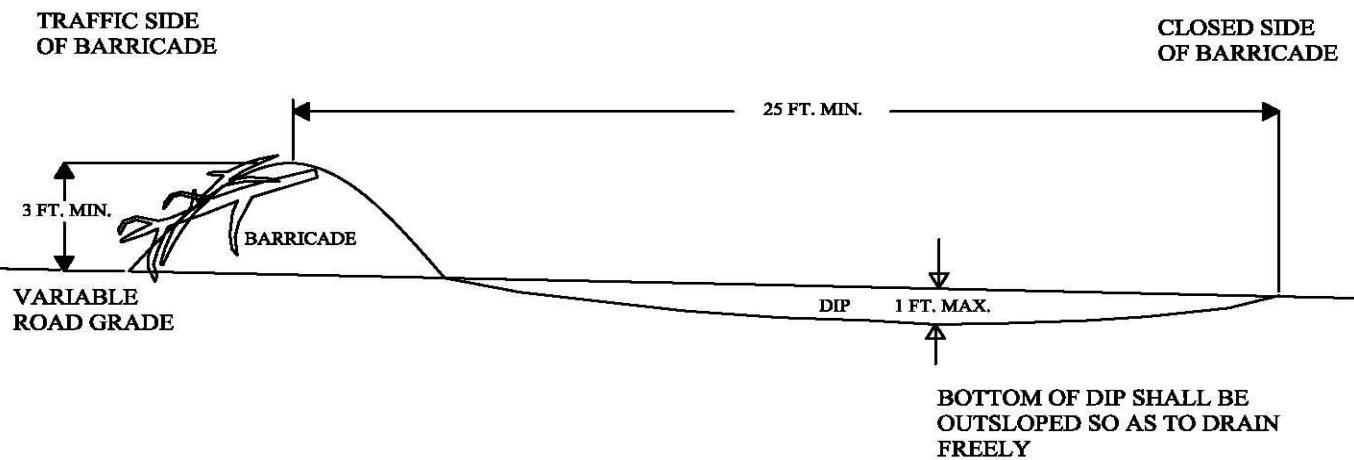
CRUSH TIMBER SALE
AGREEMENT NO. 30-100998
Drawn By: J. Gross
Designed By: J. Gross

BARRICADE DETAIL



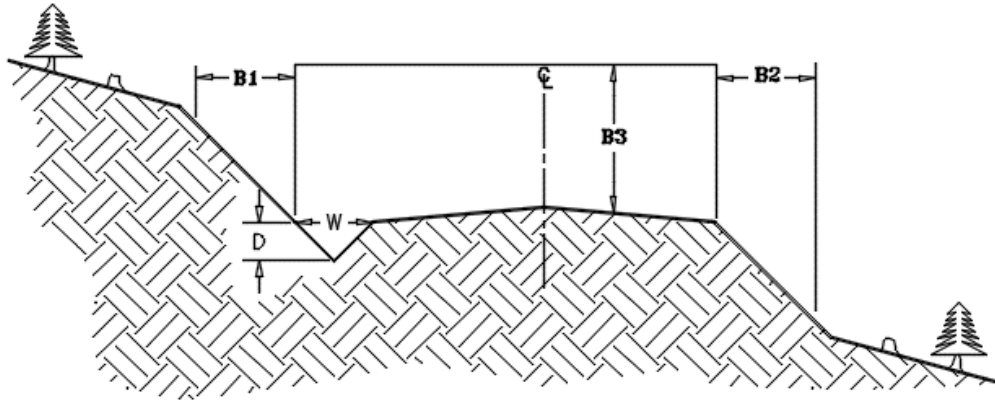
SLASH AND ROOT WADS SHALL BE INCORPORATED INTO THE TRAFFIC SIDE OF THE BARRICADE.

PLAN VIEW



PROFILE VIEW

BRUSHING DETAIL (not to scale)



BRUSHING LIST

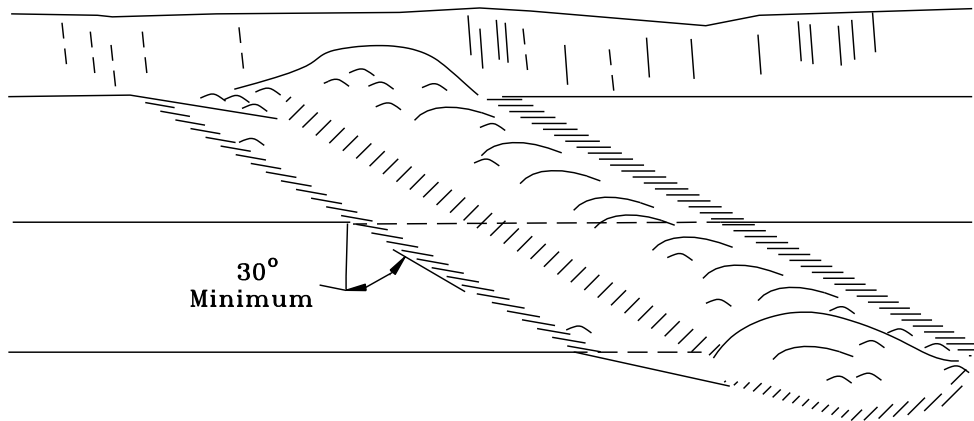
Road Number	From station	To station	Road Width (feet)	Ditch**		Brushing Limits (feet)			Remarks <u>In addition to brushing...</u>
				Width (feet)	Depth (feet)	B1	B2	B3	
				W	D	B1	B2	B3	
B-7000	22+00	60+00	Variable	3	1	8	8	14	Cut brush an extra 16 feet on the inside of a curve to provide extra visibility on switchbacks and curves
B-7200	0+00	20+14	Variable	3	1	8	8	14	Only required to cut brush on the left hand side of this road. Timber sale unit on opposite side
KC-0100	0+00	19+10	Variable	3	1	8	8	14	
KC-0120	0+00	27+00	Variable	3	1	8	8	14	

B1 extends horizontally the specified distance in feet from the back of the ditch. B2 extends horizontally the specified distance in feet from the outside edge of the running surface. Brush is defined as all non-merchantable vegetative material found within the specified limits. Brush must be cut to a height of 3 inches above the ground. Brush that is cut shall be removed to the downhill side of the road and placed such that it will not block ditches, ditch-outs, or drainage structures. Signs, culvert location markers, culverts or any other identification features damaged by brushing shall be replaced at the Purchasers expense.

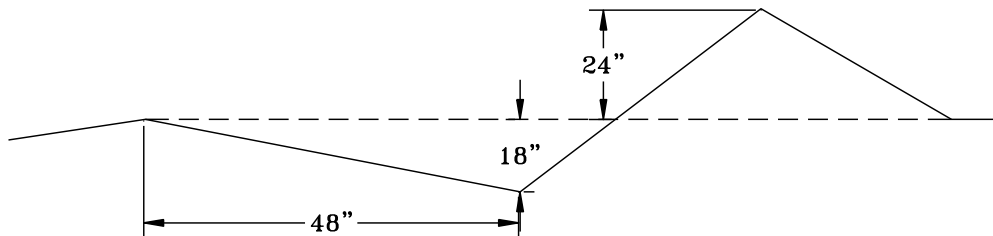
**Ditch Width and Ditch Depth are estimated, some existing roads may have slightly larger or smaller widths and depths. The Brushing Limits shall extend from the edge of ditch as seen in detail above.

Non-Drivable Water Bar Detail

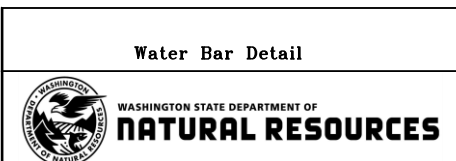
Cross Ditch



Cross Section at Centerline

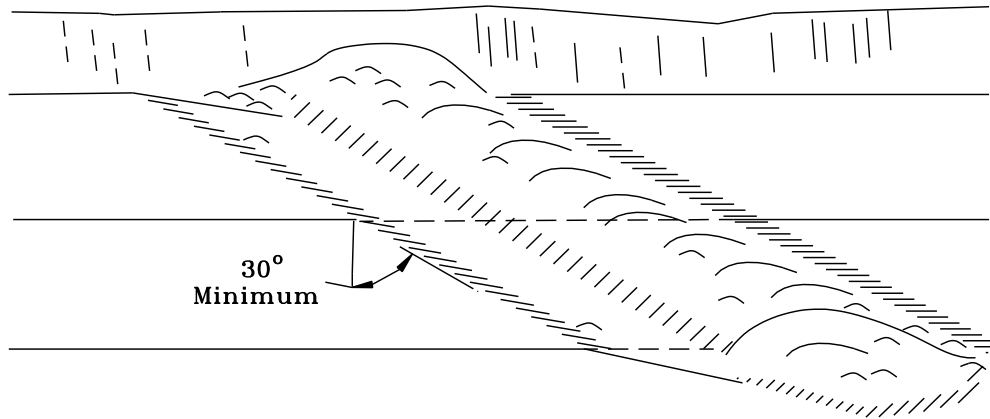


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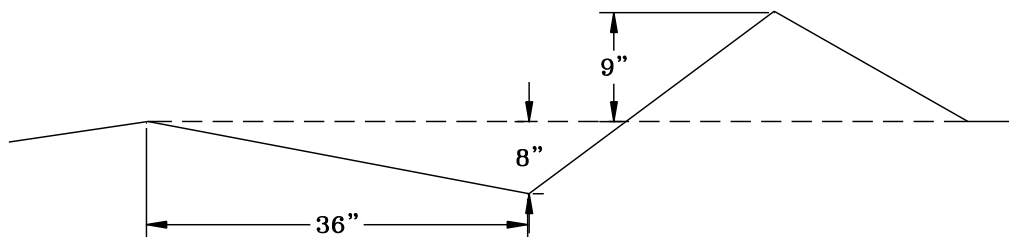


Drivable Water Bar Detail

Cross Ditch

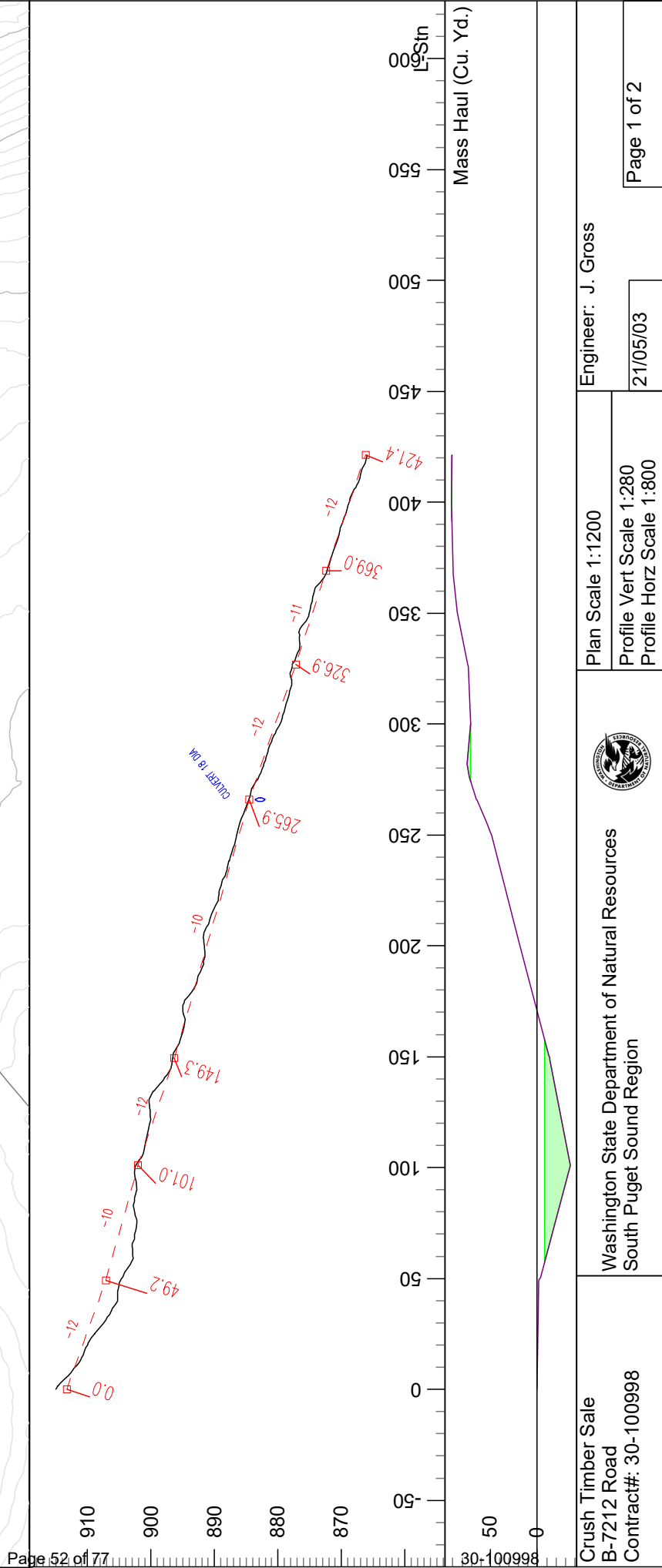
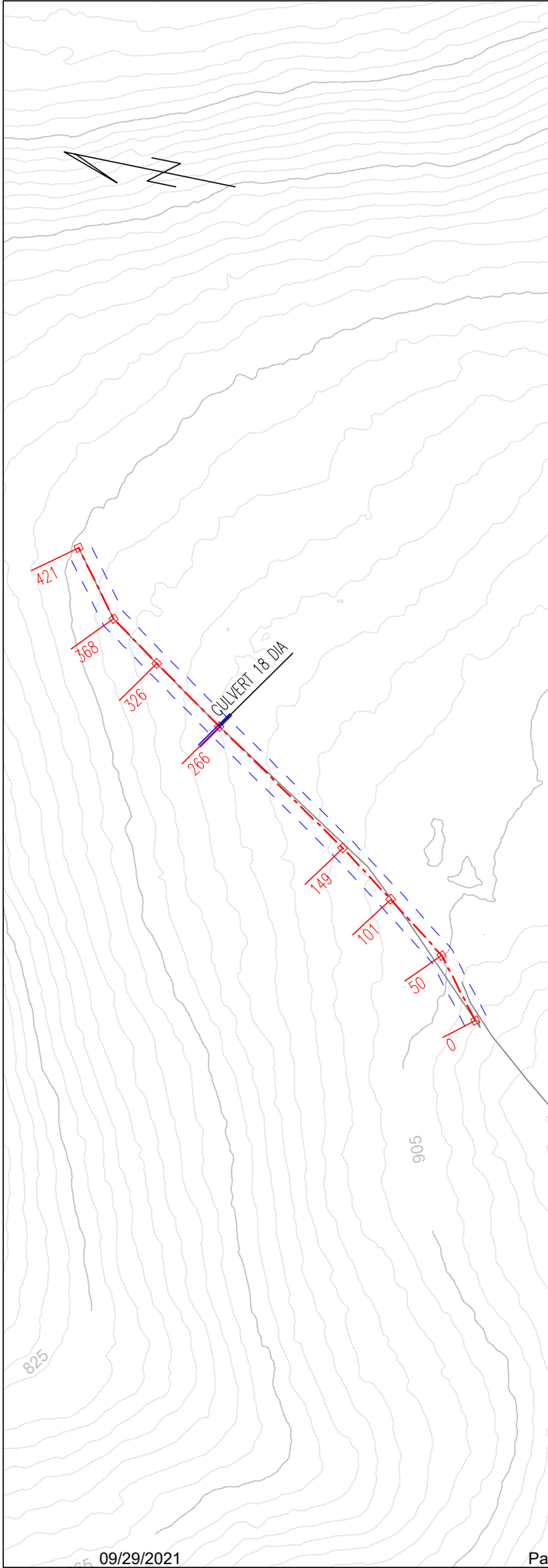


Cross Section at Centerline



Date:
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App#
Drawn by: M.A.D.





Engineer: J. Gross

Plan Scale 1:1200

Washington State Department of Natural Resources
South Puget Sound Region

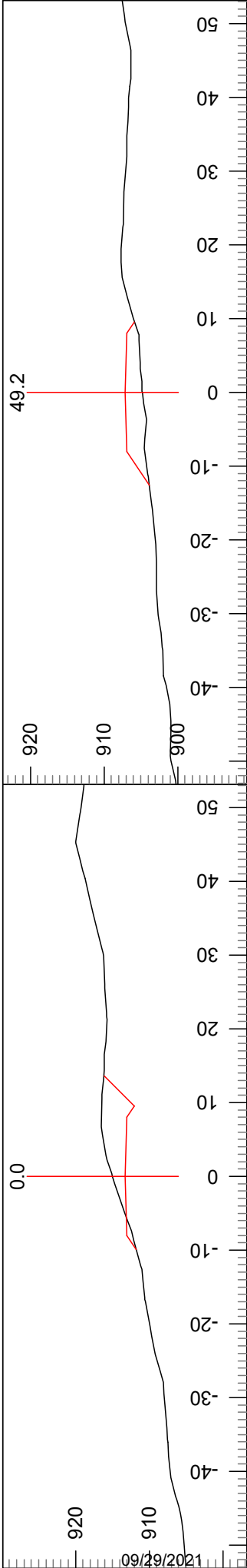
Crush Timber Sale
B-7212 Road
Contract#: 30-100998

Profile Vert Scale 1:280

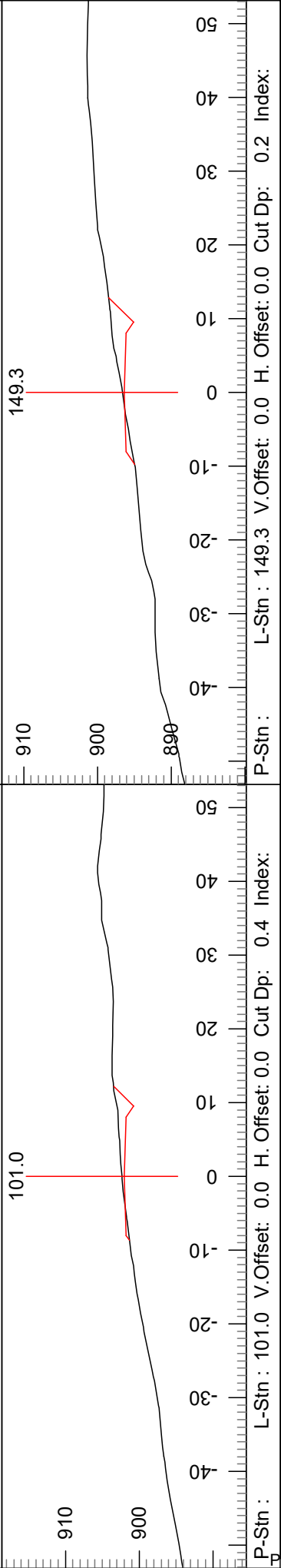
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21/05/03

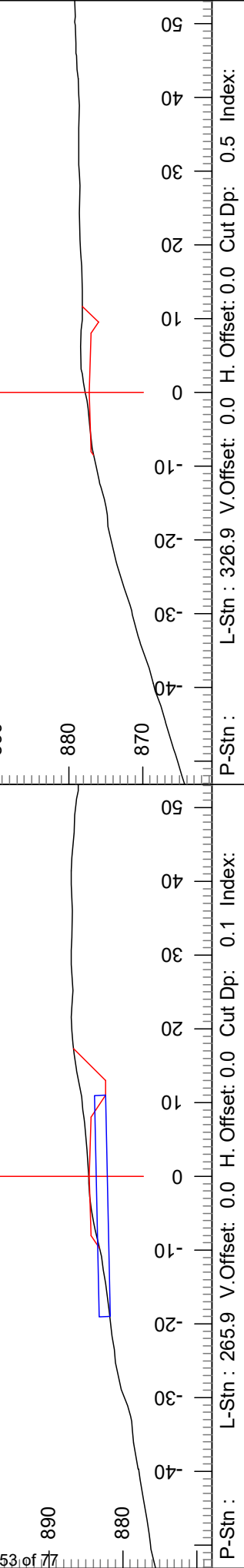
Page 1 of 2



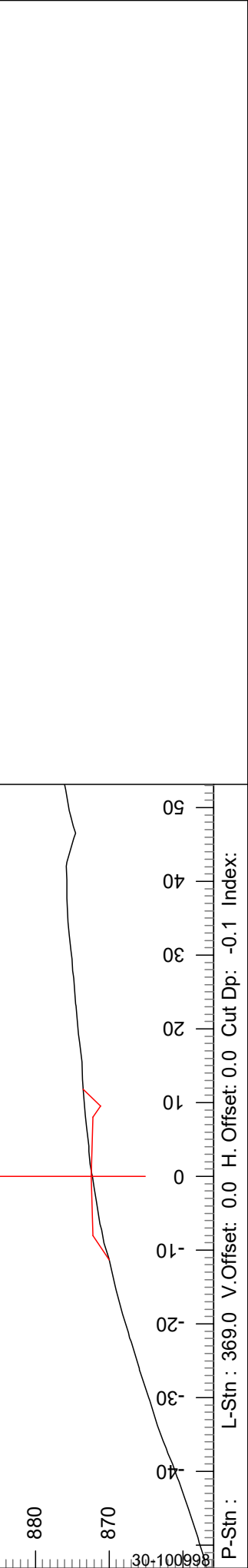
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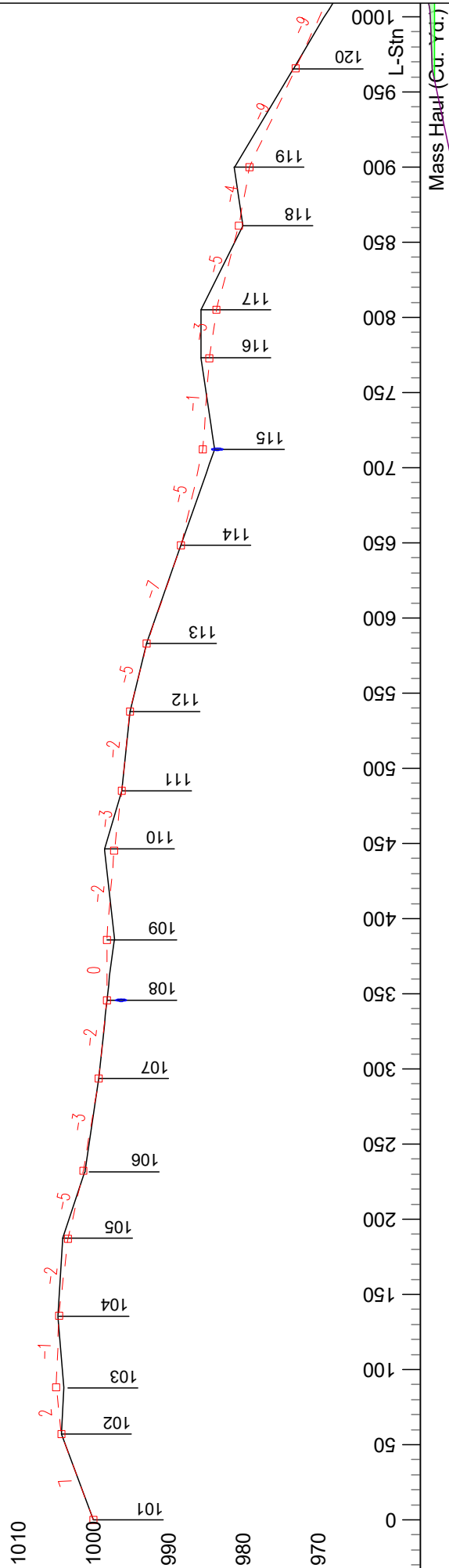
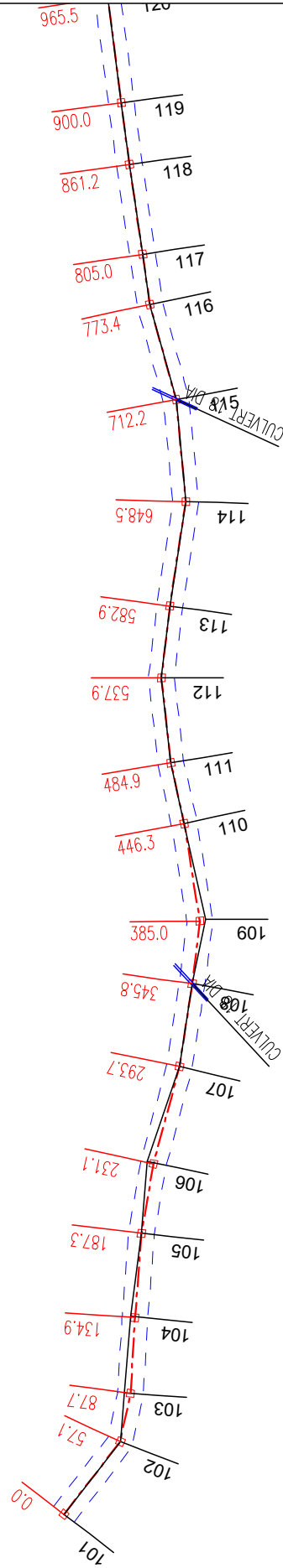
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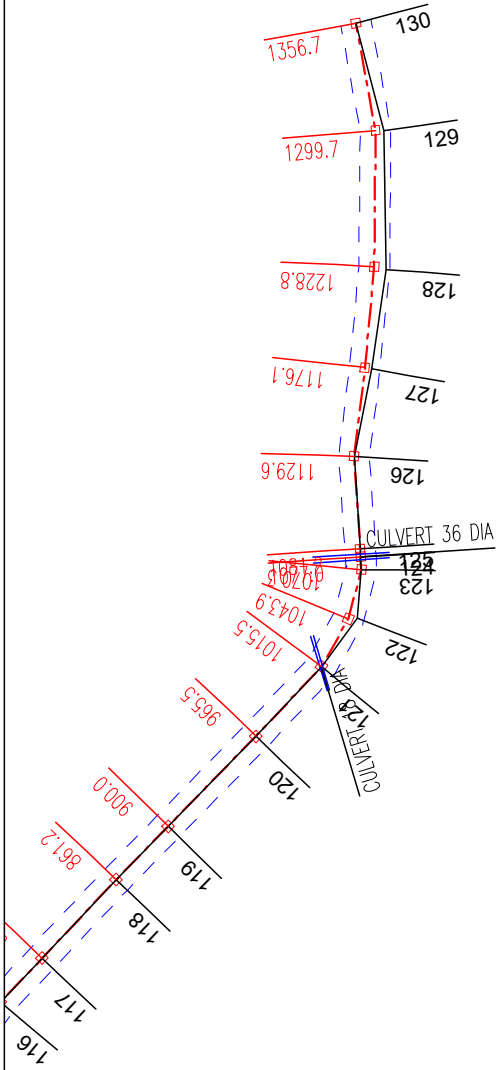
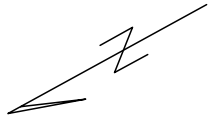


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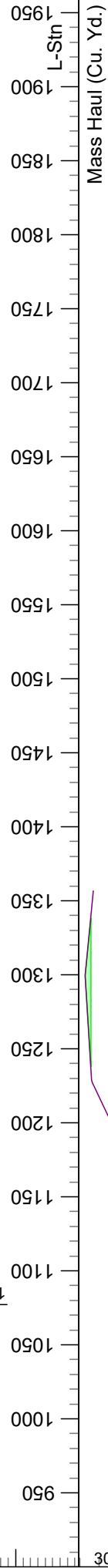
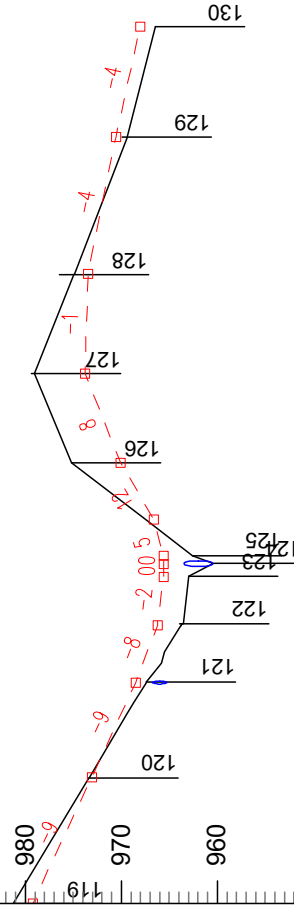
Mass Haul (Cu. Yd.)





09/29/2021

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Washington State Department of Natural Resources
South Puget Sound Region

Crush Timber Sale
KC-0123 Road
Contract#: 30-100998

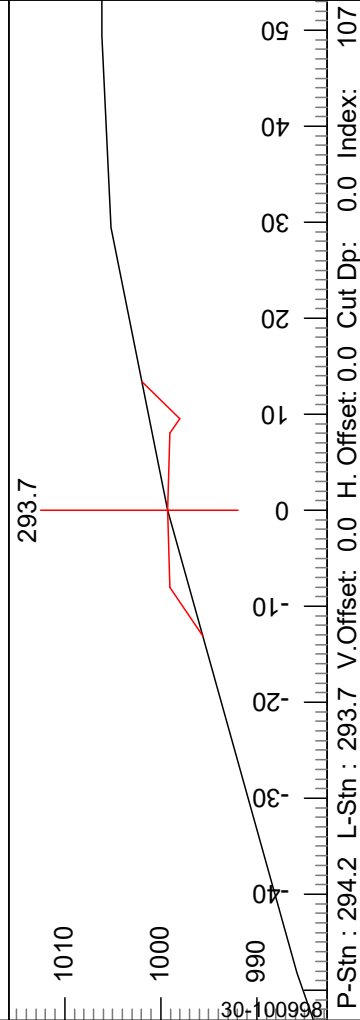
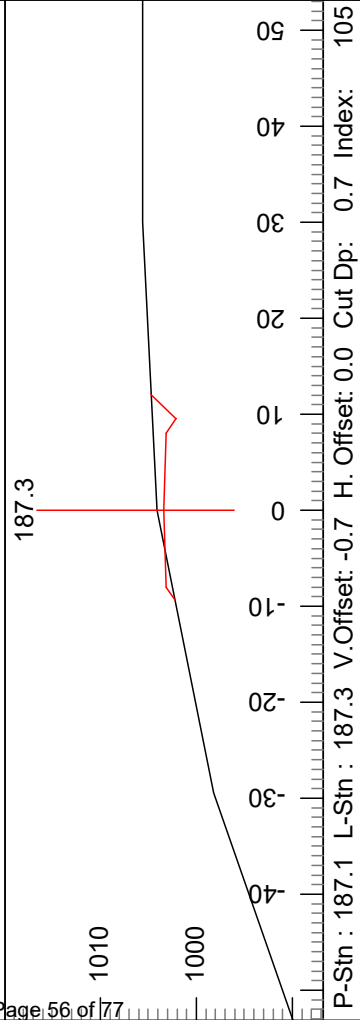
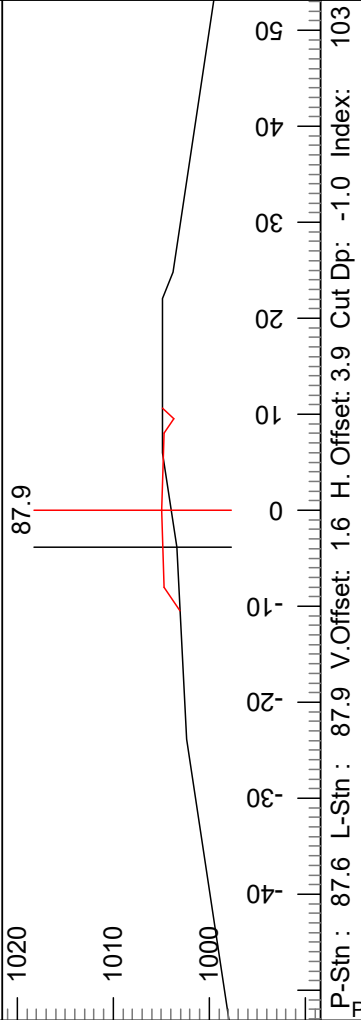
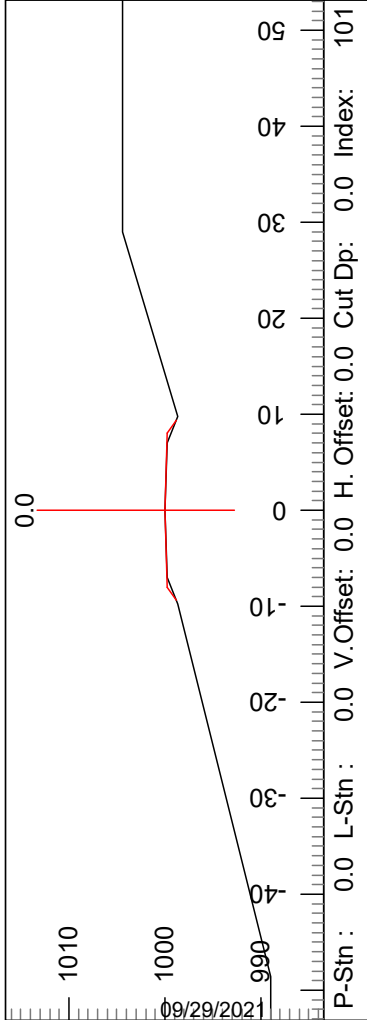
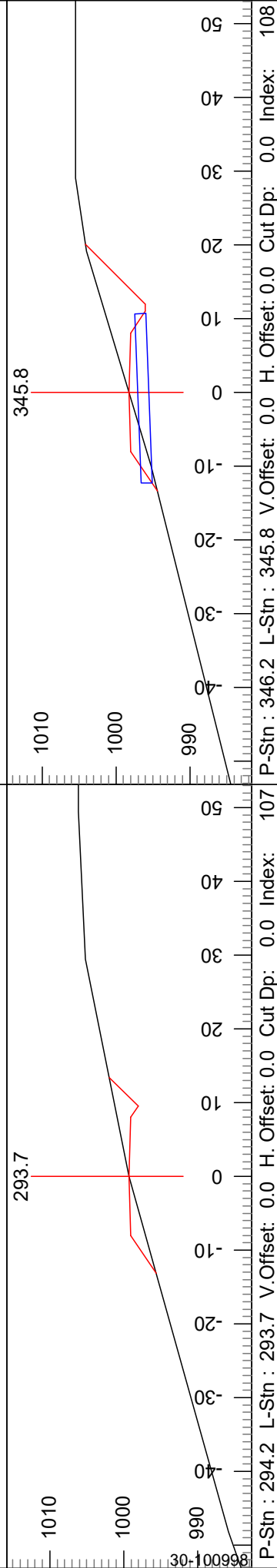
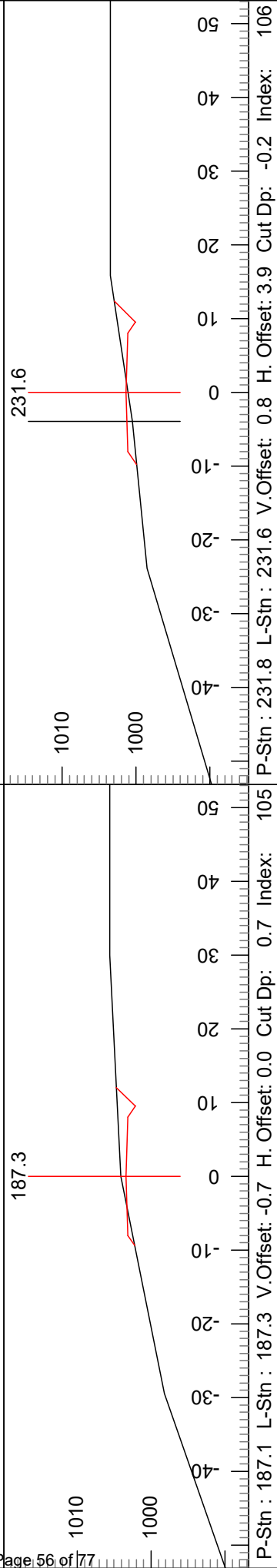
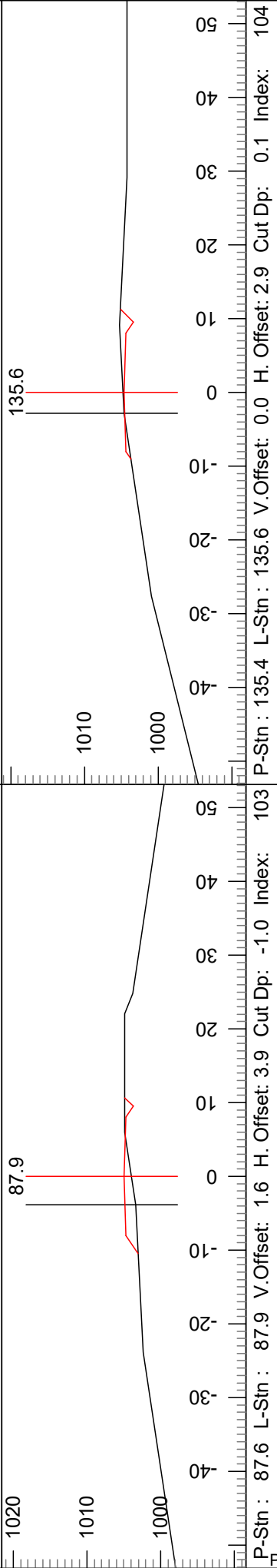
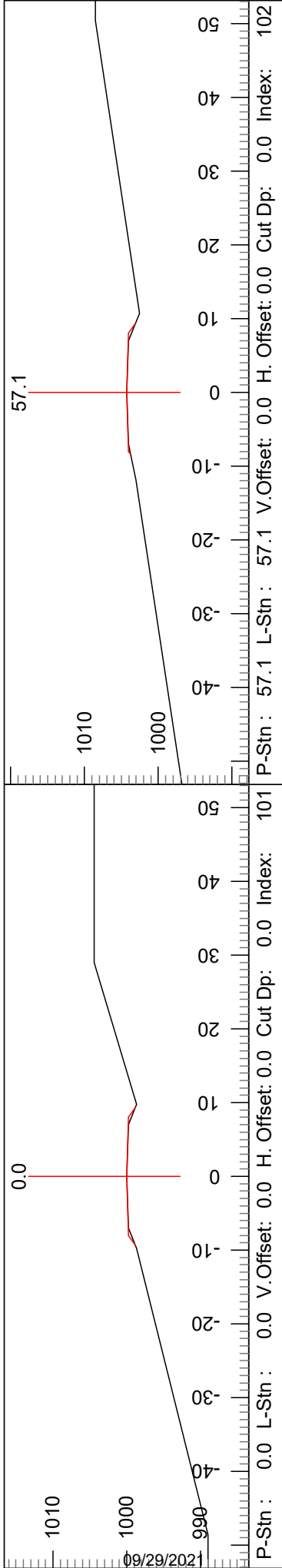
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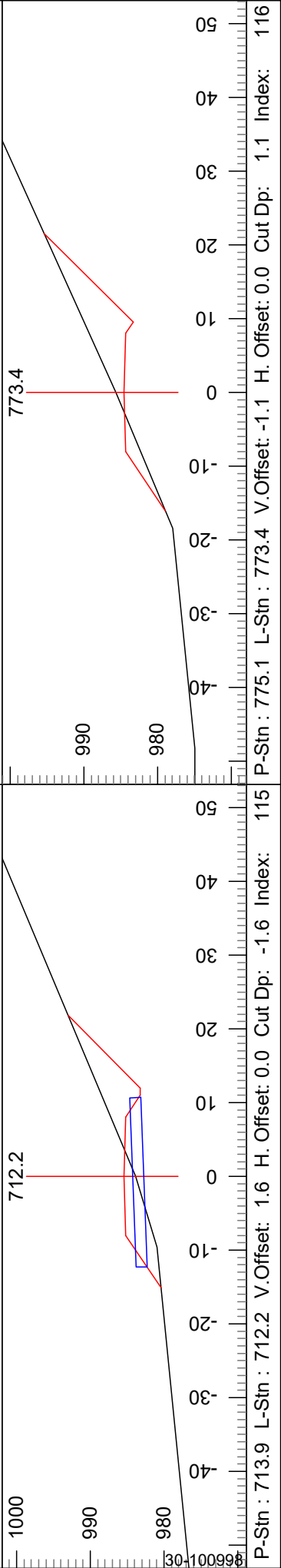
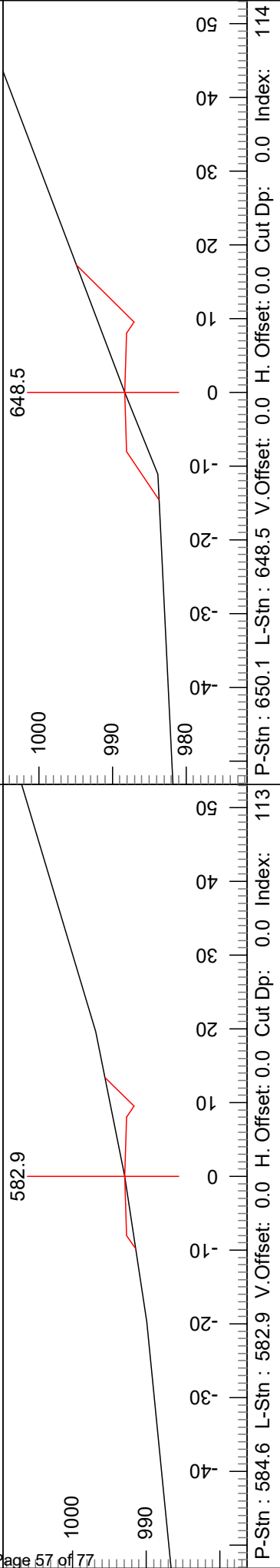
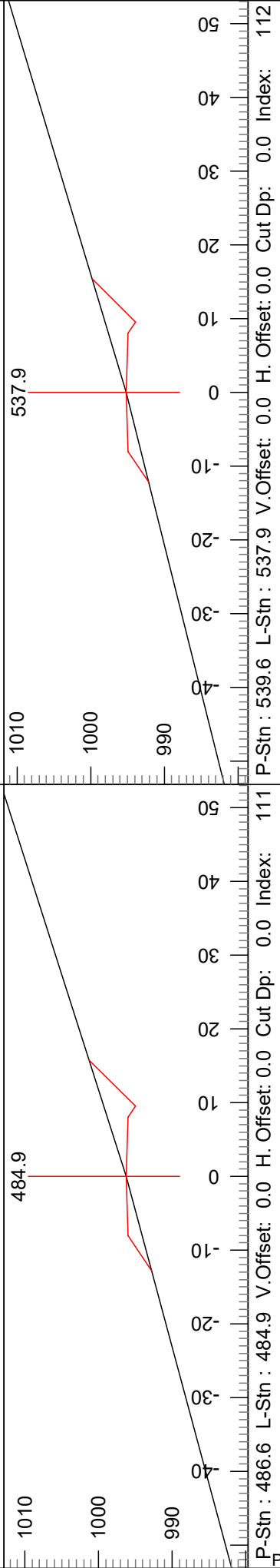
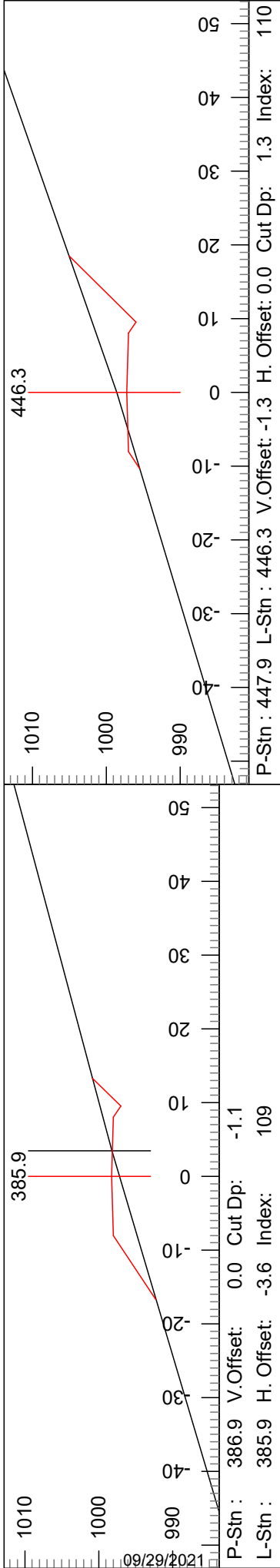
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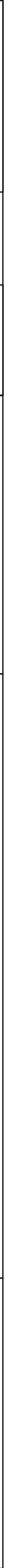
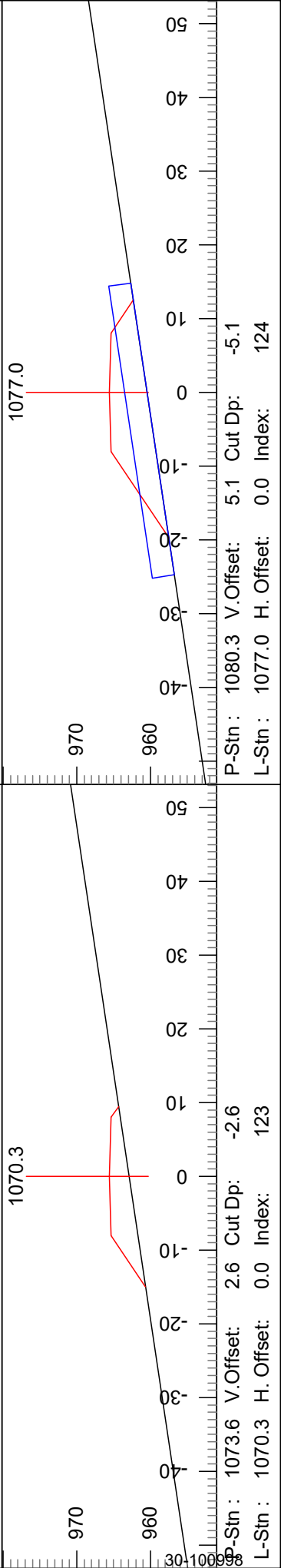
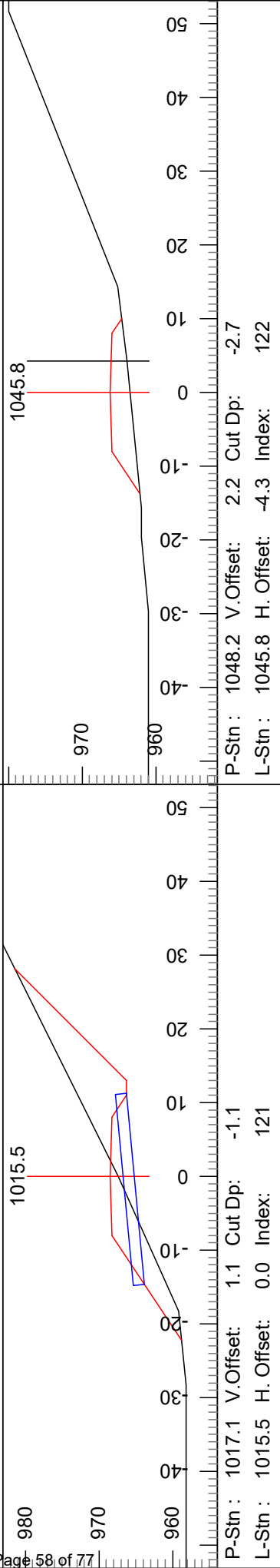
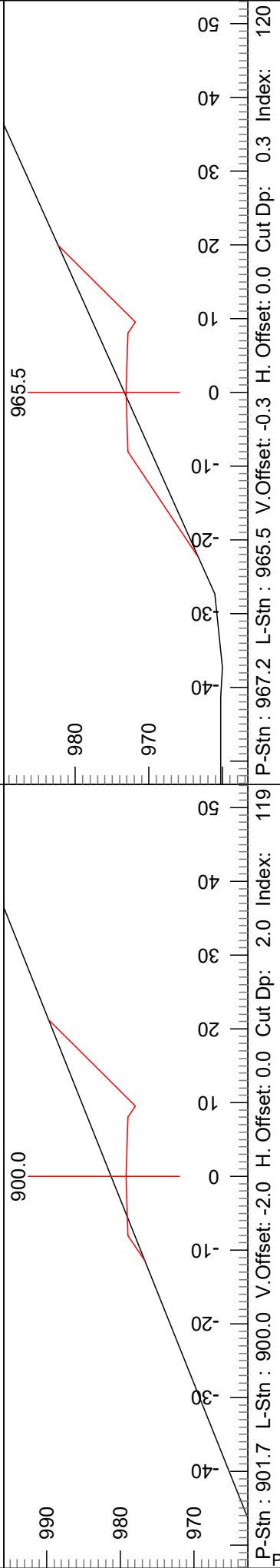
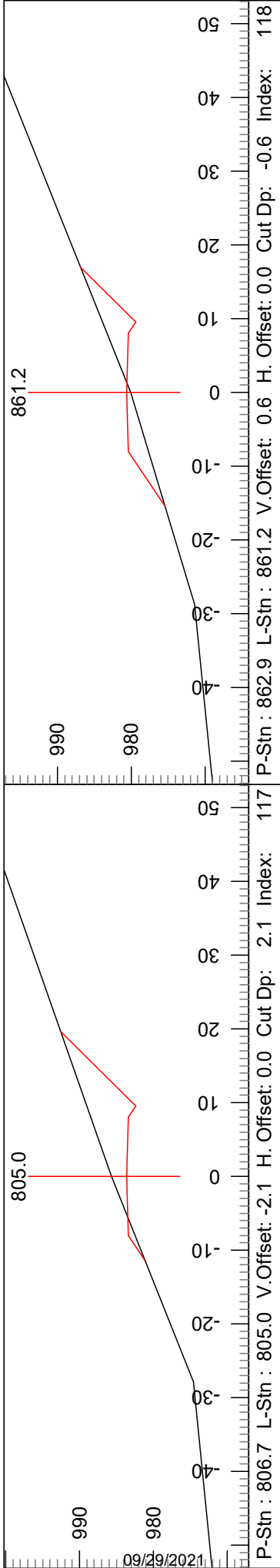
Engineer: J. Gross

21/05/06

Page 2 of 6







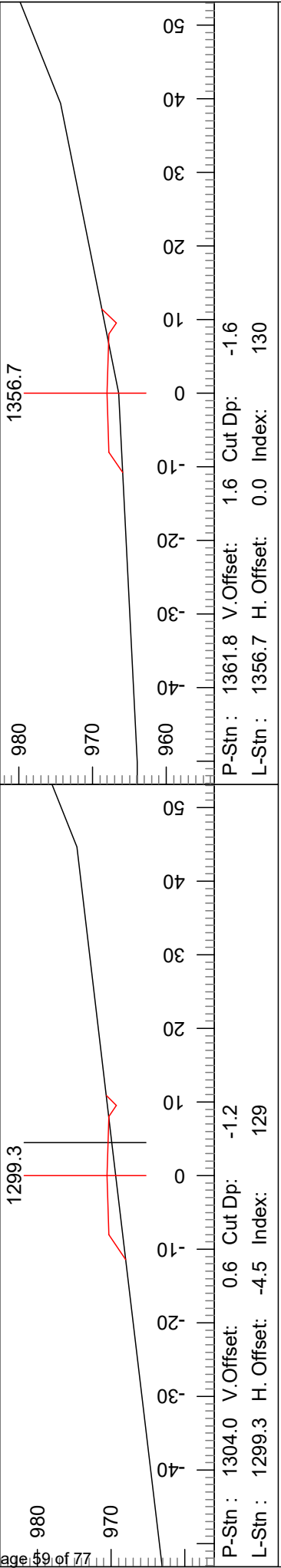
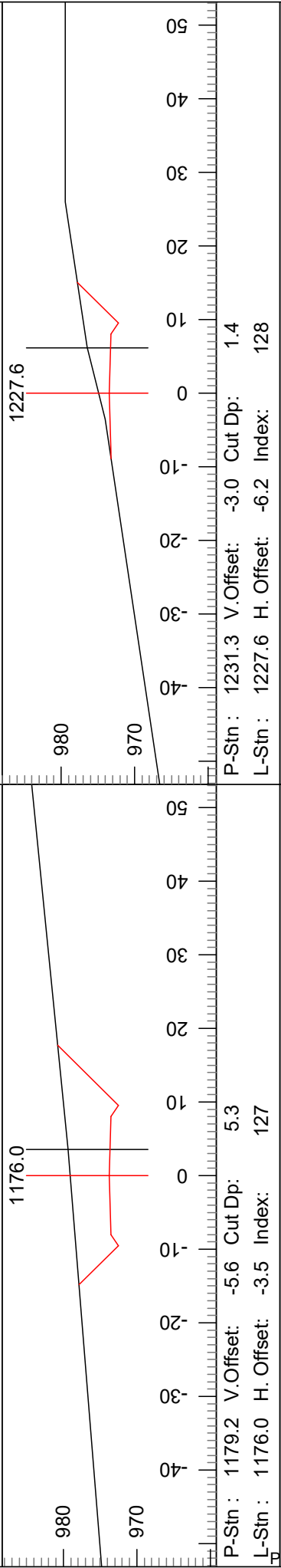
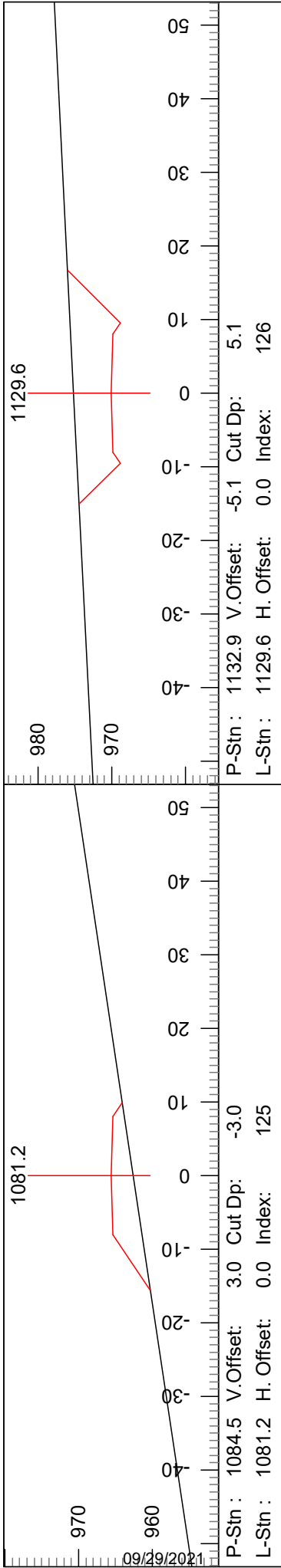
Washington State Department of Natural Resources
South Puget Sound Region

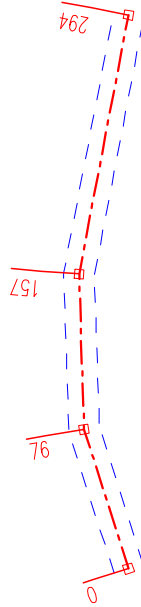
Crush Timber Sale
KC-0123 Road
Contract#: 30-100998

Engineer: J. Gross

Section Scale 1:240

Page 5 of 6





900

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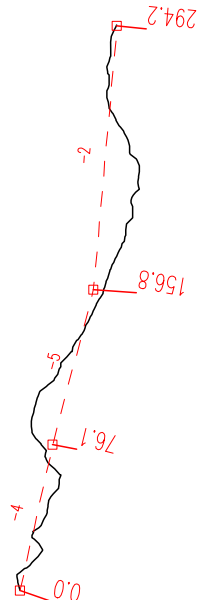
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L-Stn

Mass Haul (Cu. Yd.)



Crush Timber Sale
KC-0127 Road
Contract#: 30-100998

Washington State Department of Natural Resources
South Puget Sound Region



Plan Scale 1:1200

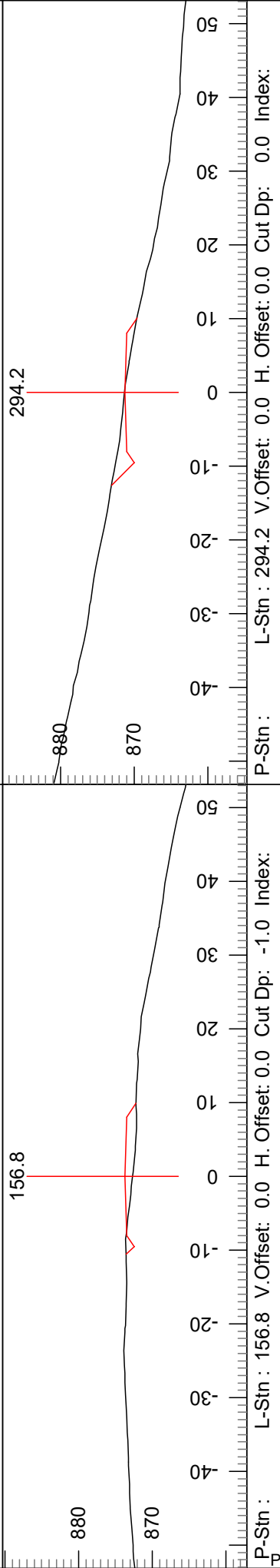
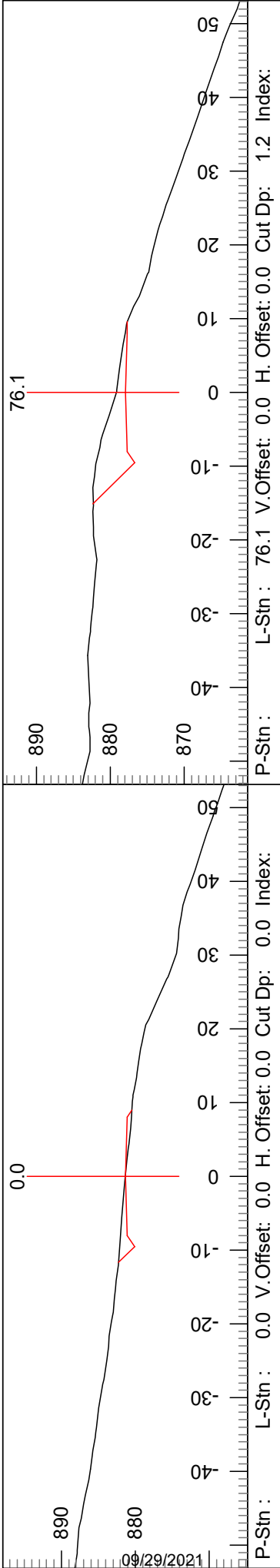
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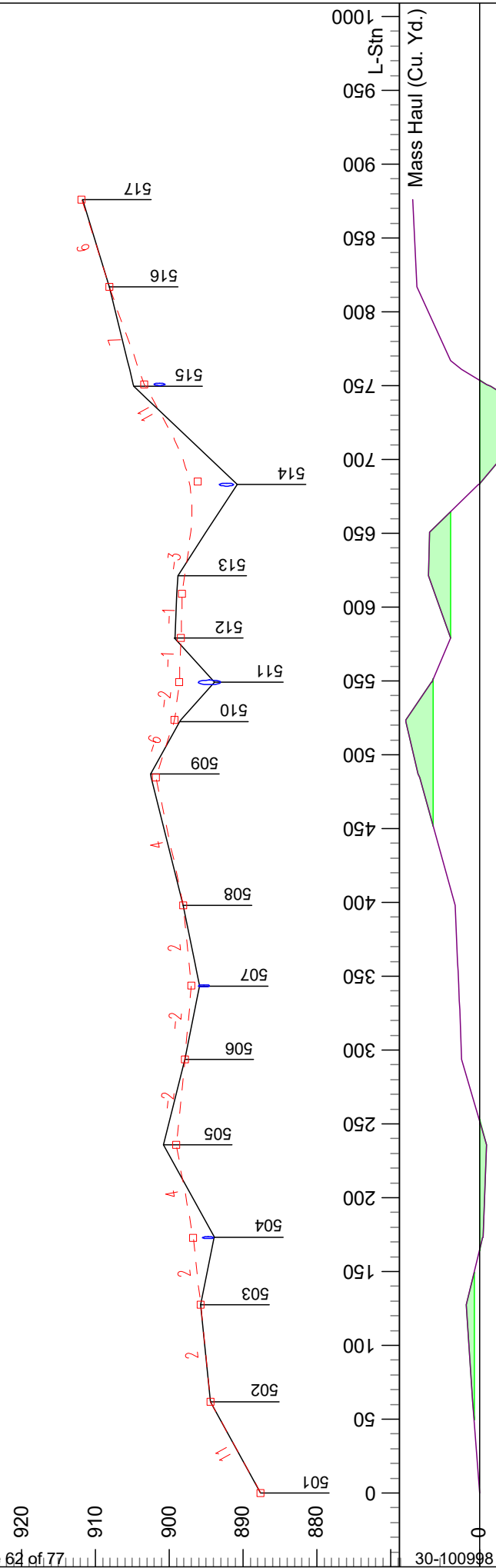
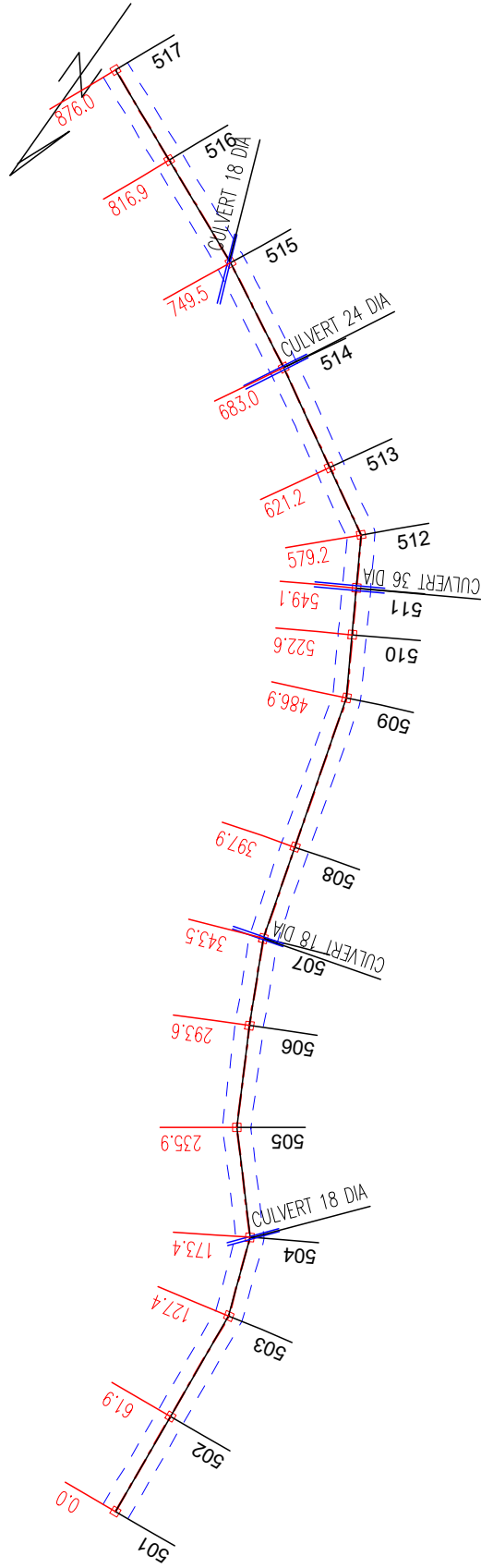
Engineer: J. Gross

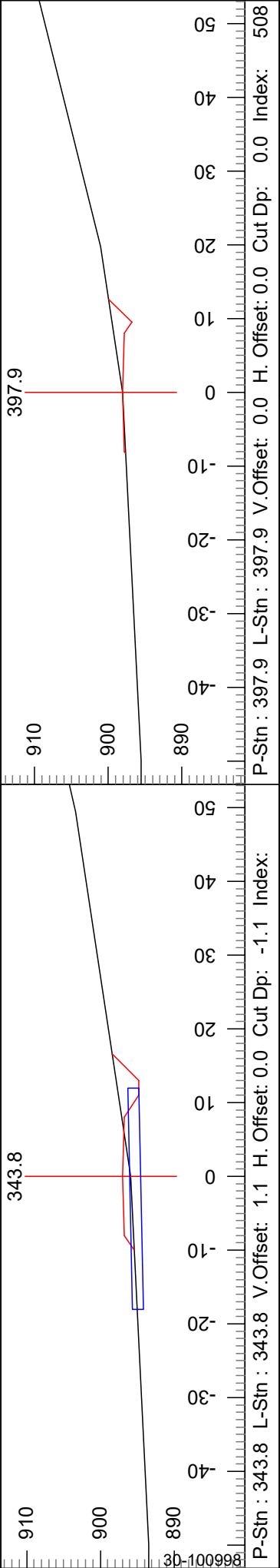
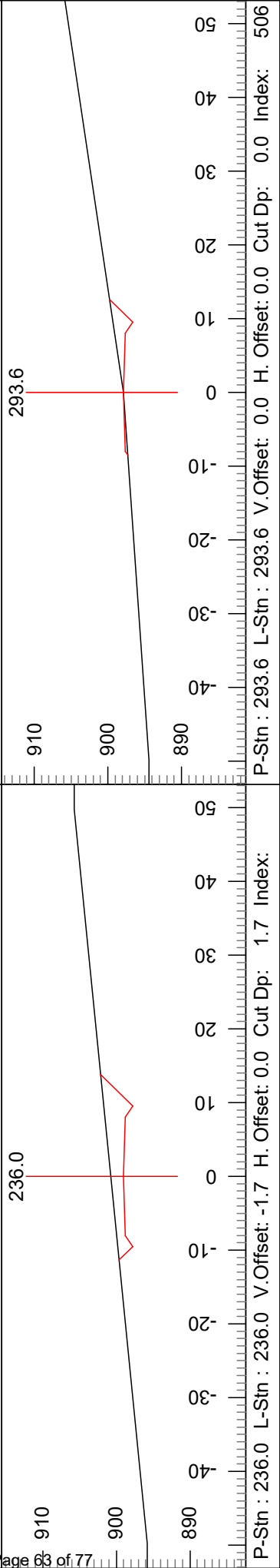
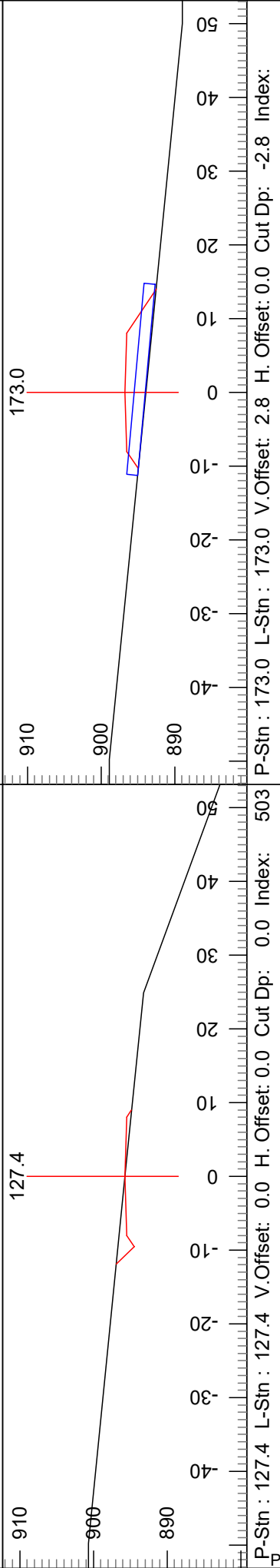
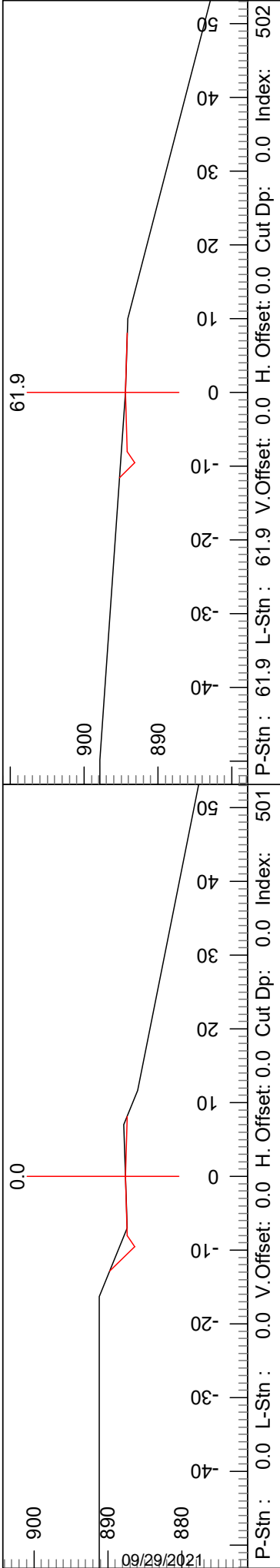
21/05/03

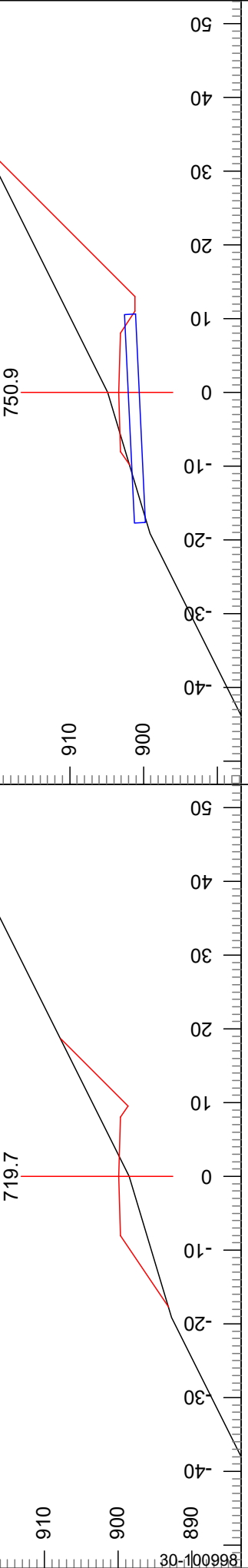
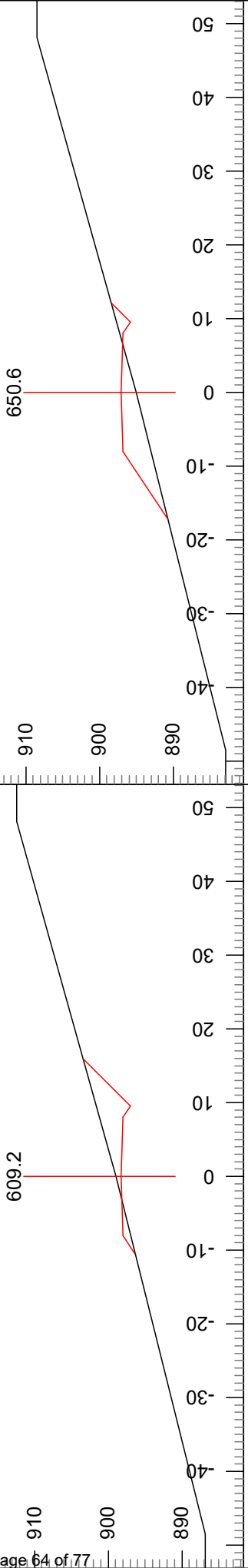
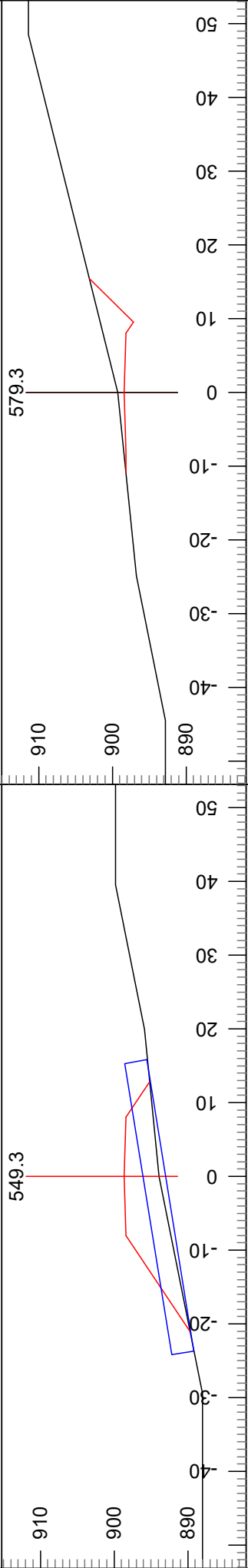
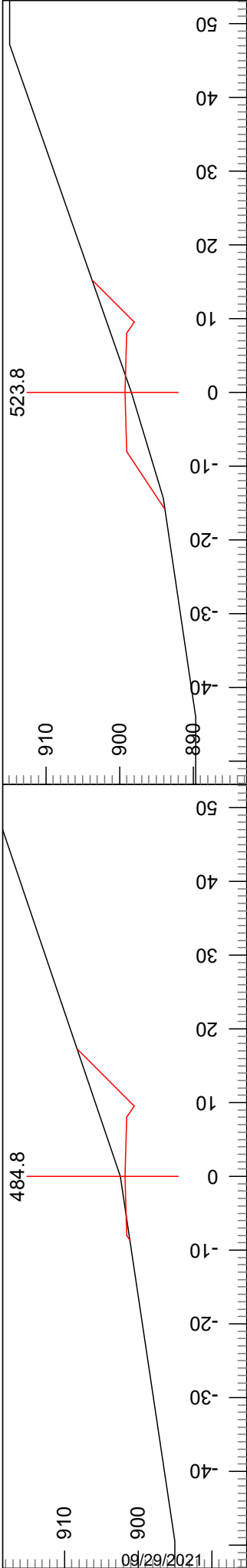
Page 1 of 2

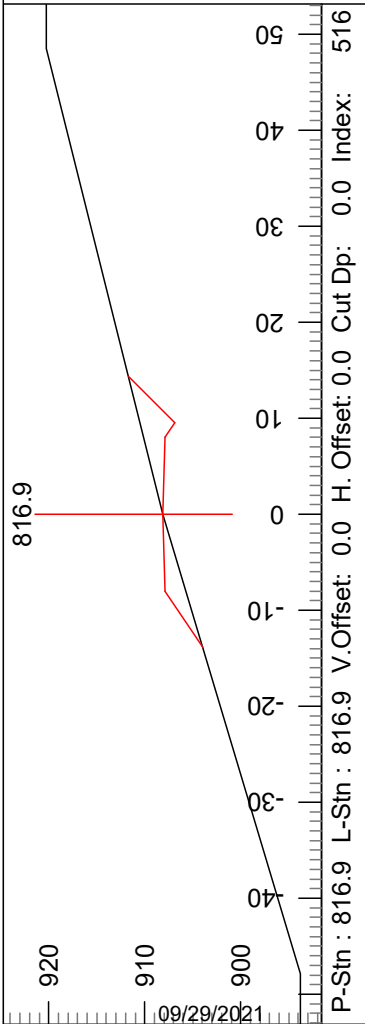


Crush Timber Sale KC-0127 Road Contract#: 30-100998		 Washington State Department of Natural Resources South Puget Sound Region	Engineer: J. Gross 21/05/03		Page 2 of 2
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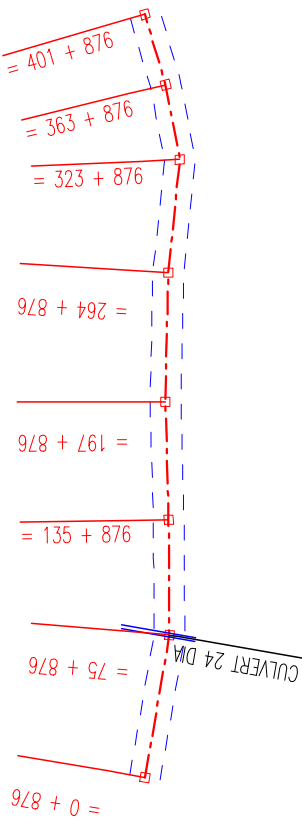








Crush Timber Sale KC-0128 Road Contract#: 30-100998	 Washington State Department of Natural Resources South Puget Sound Region	Engineer: J. Gross	
		Section Scale 1:240	21/05/03 Page 4 of 4



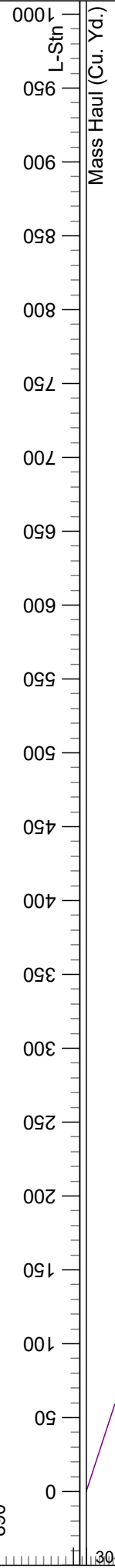
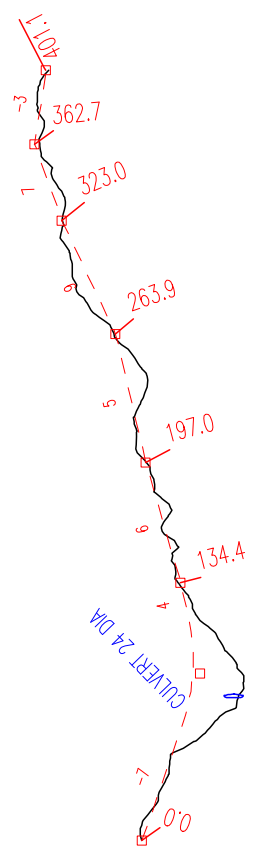
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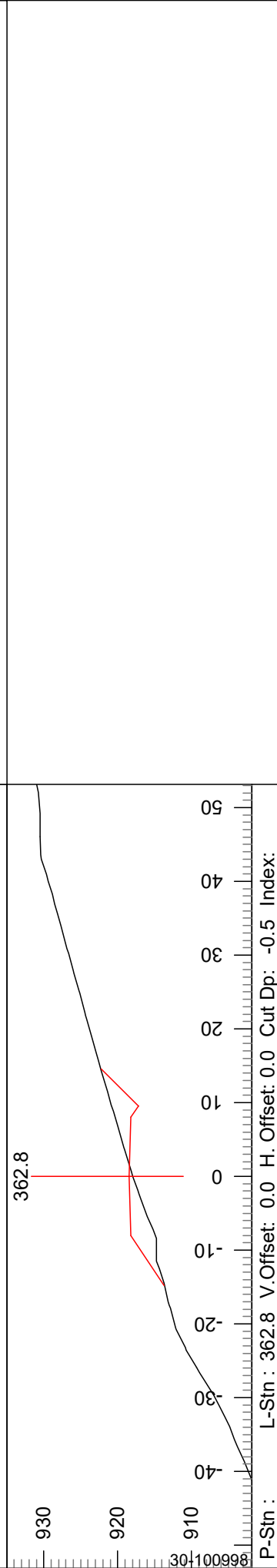
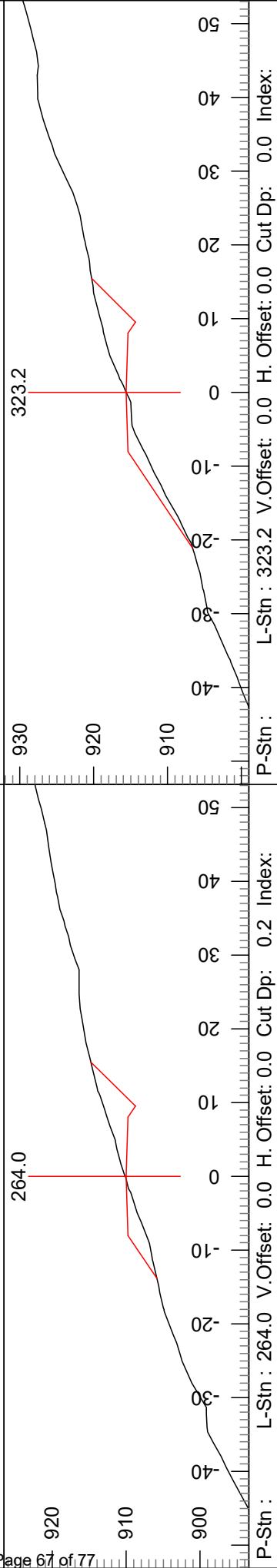
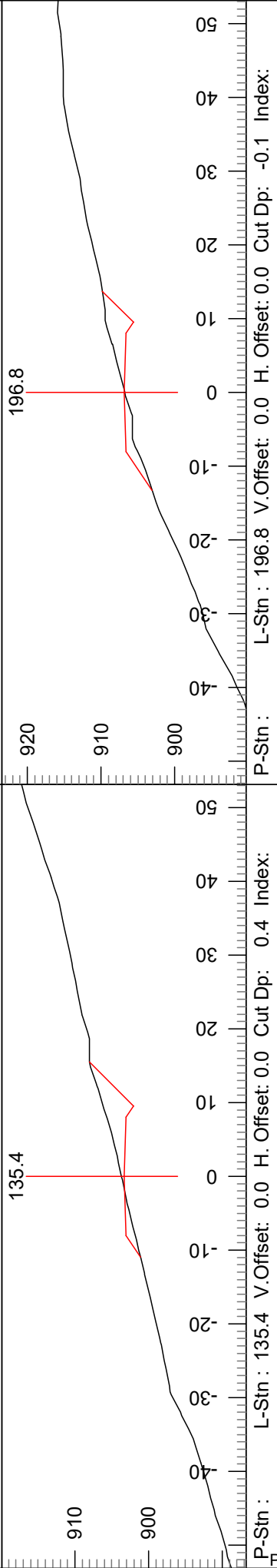
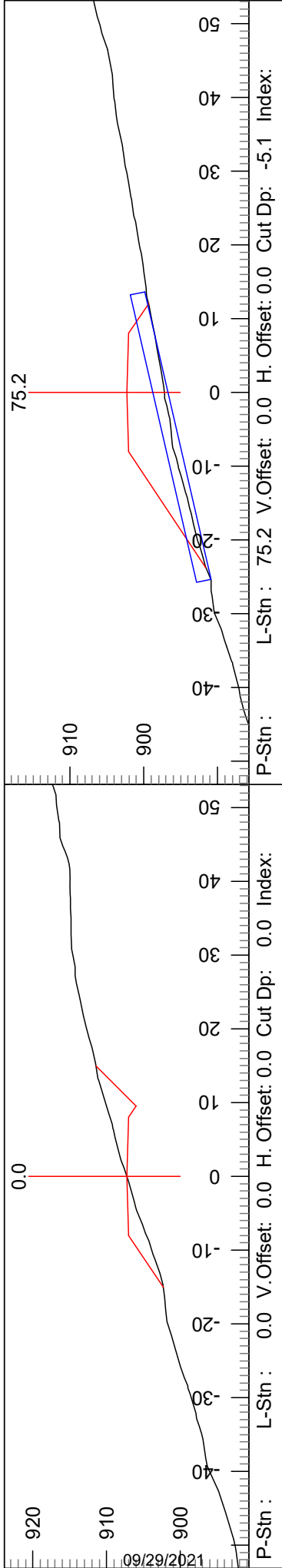
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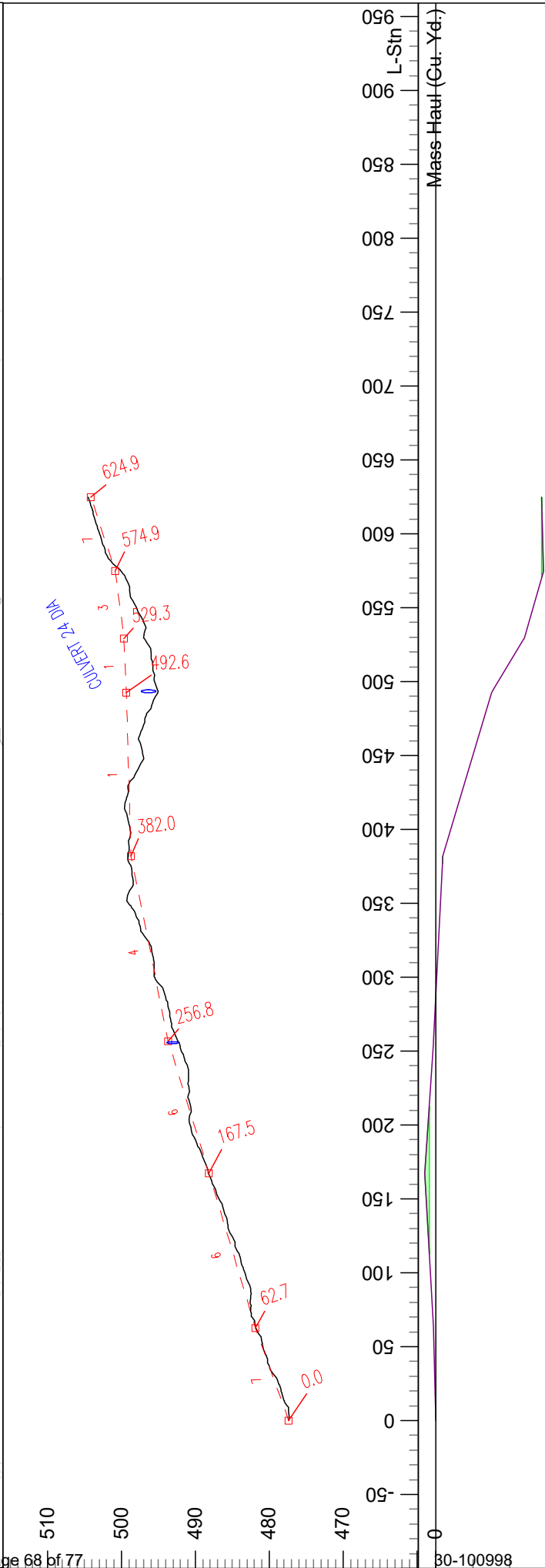
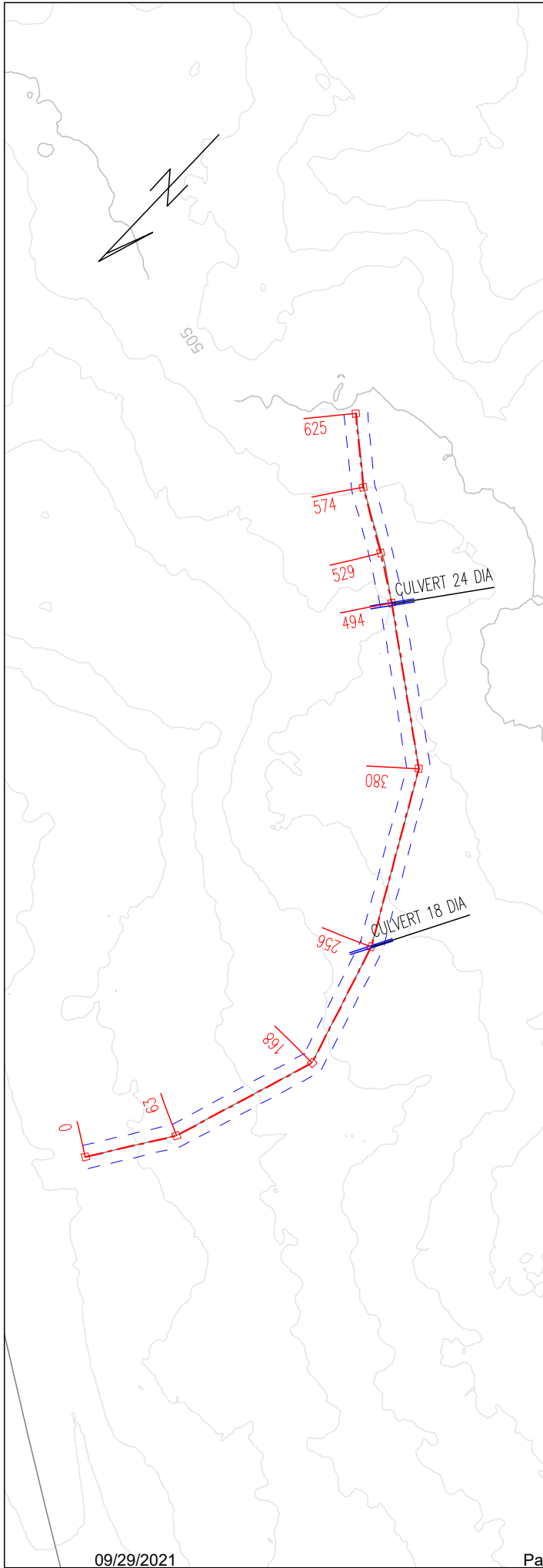
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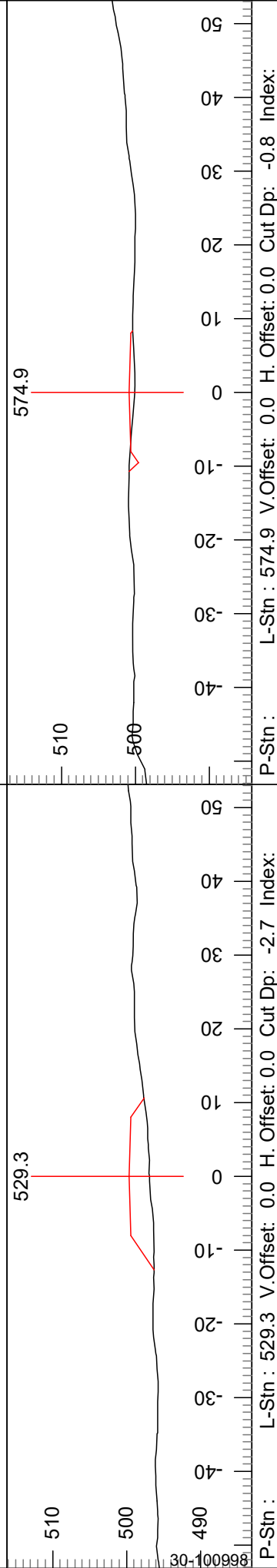
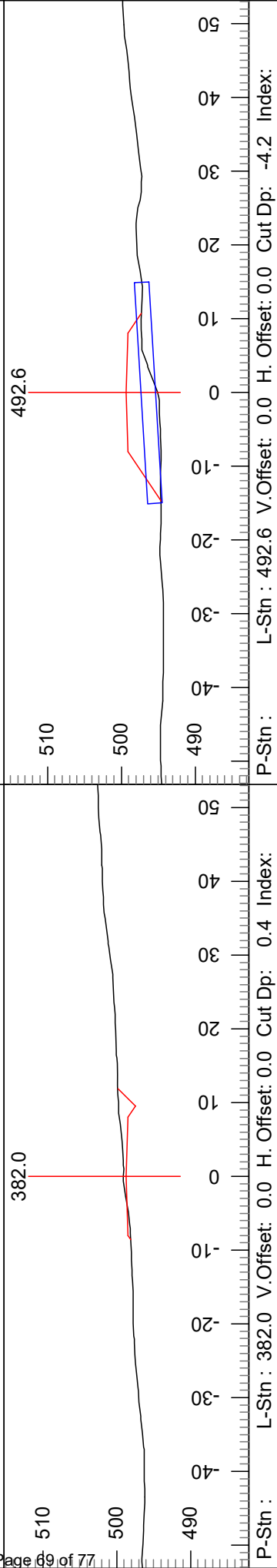
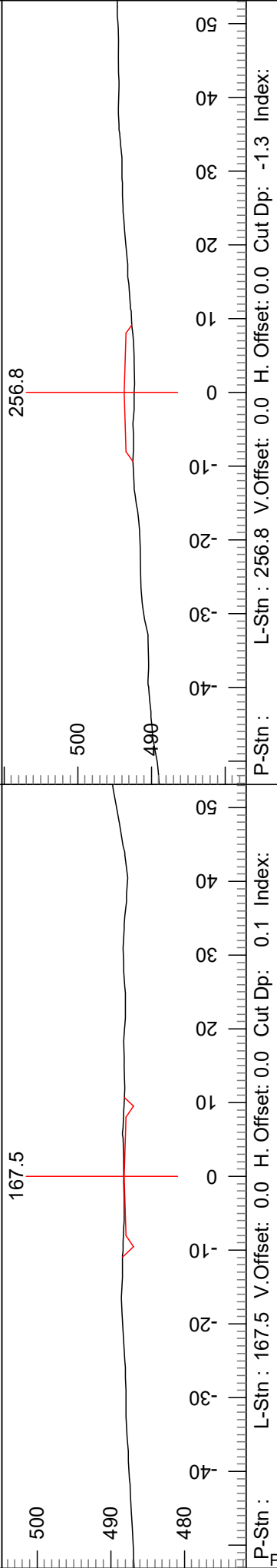
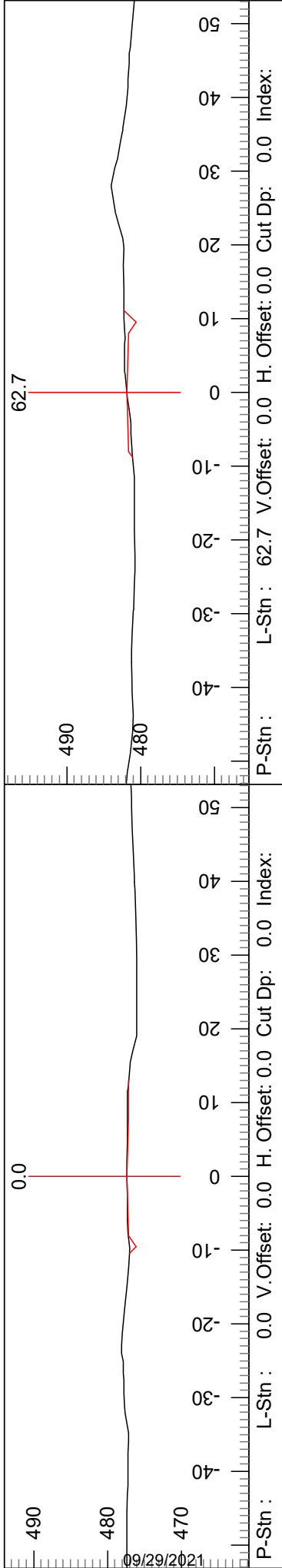
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890









STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
SOUTH PUGET SOUND REGION

STINKFOOT QUARRY DEVELOPMENT PLAN
NE ¼ NE ¼ Sec.28, T18N, R04W W.M.
Page 1 of 2

1. Rock for manufacture shall be obtained from any existing shot rock in front of the quarry face, then Area A.
2. All vegetation including stumps shall be cleared a minimum of 35 feet beyond the top of all working faces. Trees shall be cleared to a minimum of ½ of the height of the tallest tree adjacent to the pit. A minimum 25 foot wide stripped area shall be maintained from working faces at all times.
3. Overburden shall be end hauled or pushed to the overburden waste area and compacted. Minimal acceptable compaction is achieved by placing waste material in 2 foot or shallower lifts and routing excavation equipment over the entire width of the lift. Final slope shall not exceed 1 ½ (H):1 (V). If overburden is pushed across the KC-6500, not less than 60 cubic yards of 2 ½" minus crushed rock shall be placed, graded, and compacted over the contaminated segment of road. This rock will be in addition to that shown on the ROCK LIST. The ditch line of the KC-6500 below the quarry site shall be re-established to the specification shown on the TYPICAL SECTION SHEET.
4. Final placement of waste material shall be approved in writing by the Contract Administrator. Final stockpile location shall be as shown on the quarry development map or as approved in writing by the Contract Administrator.
5. Root wads and organic debris larger than one cubic foot in volume shall be separated from overburden material and piled separately in an organic waste area.
6. Quarry faces shall not exceed 35 feet in height and shall have a slope no steeper than ¼ (H):1 (V).
7. The width of any pit benches shall be a minimum of 1.5 times the maximum length of the largest machine used.
8. The surface of pit floors and benches shall be uniform and free-draining at a minimum 2% outslope gradient.
9. Oversize material remaining in the quarry shall not exceed 3% of the total volume mined in the source. Oversize material is defined as rock fragments larger than two feet in any direction. Oversize material shall be placed adjacent to the southwest face or as approved in writing by the Contract Administrator.
10. At the end of operations, pit faces and walls shall be scaled and cleared of loose and overhanging material, benches shall have safety berms constructed, and all access blocked to recreational vehicles.

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
SOUTH PUGET SOUND REGION

STINKFOOT QUARRY DEVELOPMENT PLAN
NE ¼ NE ¼ Sec.28, T18N, R04W W.M.
Page 2 of 2

11. All operations shall be carried out in compliance with all regulations of:
 - a. “Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations” (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration.
 - b. “Safety Standards for Construction Work” (296-155 WAC) Washington Department of Labor and Industries.
12. The quarry area shall be worked and left in a condition such that future operations may proceed in an orderly manner.
13. The quarry site shall be cleared of all temporary structures, equipment, and rubbish upon completion of rock source operations. The quarry site shall be left in a neat and presentable condition.
14. At the completion of rock source operations, Purchaser shall obtain written approval of final rock source condition and compliance with the terms of this plan from the Contract Administrator.
15. Quantity and quality of material are not guaranteed by the state.

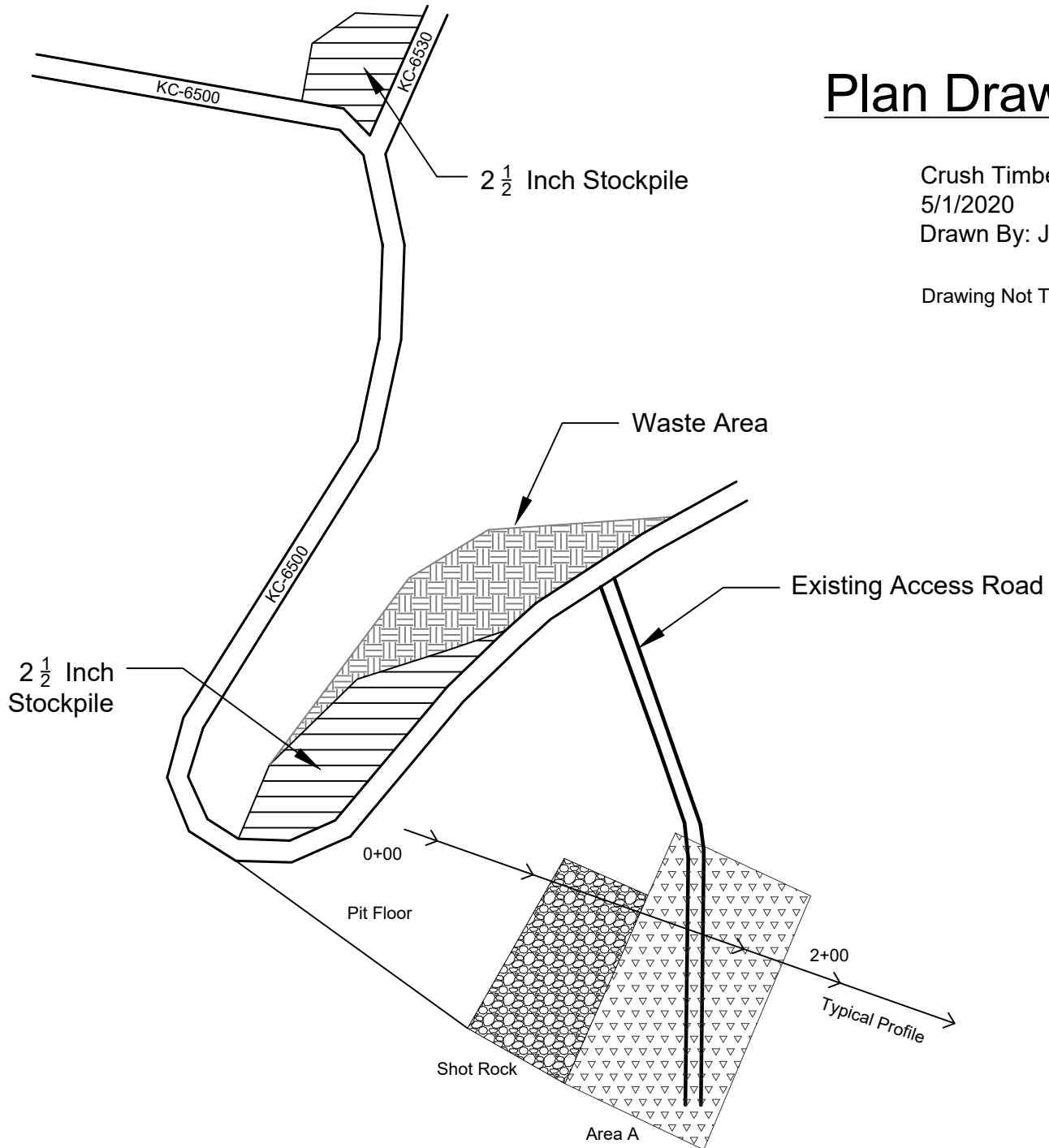
Stinkfoot Quarry

NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 28, T18N, R04W

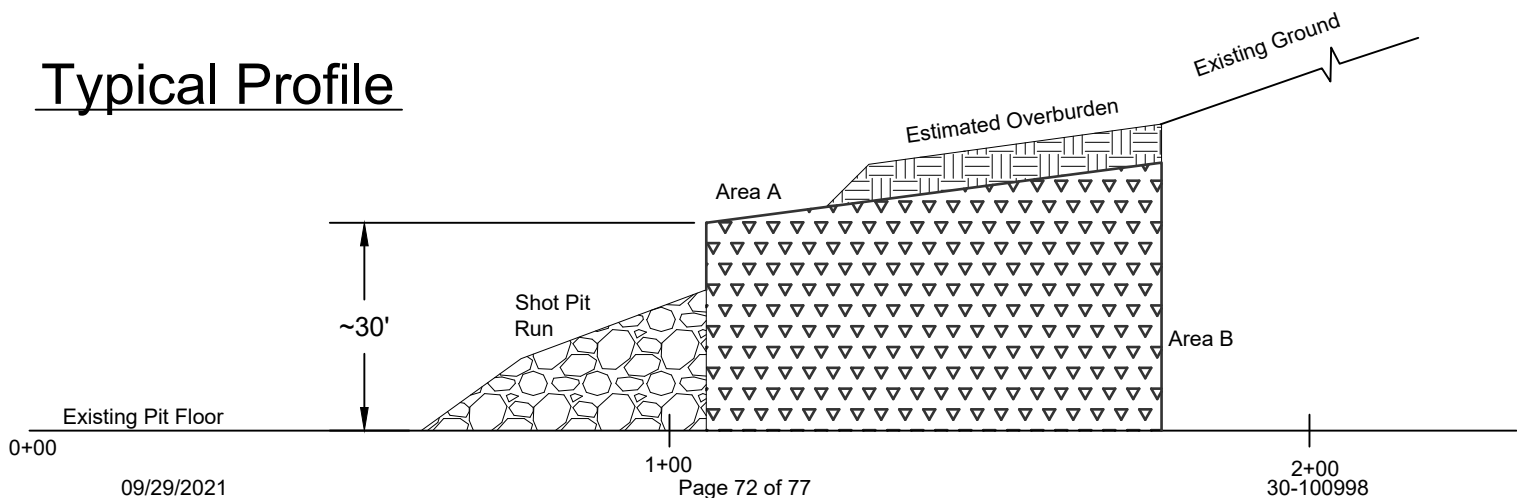
Plan Drawing

Crush Timber Sale
5/1/2020
Drawn By: J. Gross

Drawing Not To Scale



Typical Profile



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
SOUTH PUGET SOUND REGION

FIVE FORKS QUARRY DEVELOPMENT PLAN

SE ¼ NE ¼, Section 22, Township 18 North, Range 4 West, W.M.

(Page 1 of 3)

1. Rock for manufacture shall be obtained from Area A, then Area B if needed.
2. All vegetation including stumps shall be cleared a minimum of 35 feet beyond the top of all working faces. Trees shall be cleared to a minimum of ½ of the height of the tallest tree adjacent to the pit. A minimum 25 foot wide stripped area shall be maintained from working faces at all times.
3. Overburden shall be end hauled or pushed to the overburden waste area and compacted. Minimal acceptable compaction is achieved by placing waste material in 2 foot or shallower lifts and routing excavation equipment over the entire width of the lift. Final slope shall not exceed 1 ½ (H):1 (V).
4. Final placement of waste material shall be approved in writing by the Contract Administrator.
5. Root wads and organic debris larger than one cubic foot in volume shall be separated from overburden material and piled separately from overburden. Recently cut adjacent harvest unit slash piles may be added to up to 10'x10' footprint.
6. Quarry faces shall not exceed 35 feet in height and shall have a slope no steeper than ¼ (H):1 (V).
7. The width of any pit benches shall be a minimum of 1.5 times the maximum length of the largest machine used.
8. The surface of pit floors and benches shall be uniform and free-draining at a minimum 2% outslope gradient.
9. Oversize material remaining in the quarry shall not exceed 3% of the total volume mined in the source. Oversize material is defined as rock fragments larger than two feet in any direction. Oversize material shall be placed adjacent to the southwest face or as approved in writing by the Contract Administrator.
10. At the end of operations, pit faces and walls shall be scaled and cleared of loose and overhanging material, benches shall have safety berms constructed, and all access blocked to recreational vehicles.

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
SOUTH PUGET SOUND REGION

FIVE FORKS QUARRY DEVELOPMENT PLAN

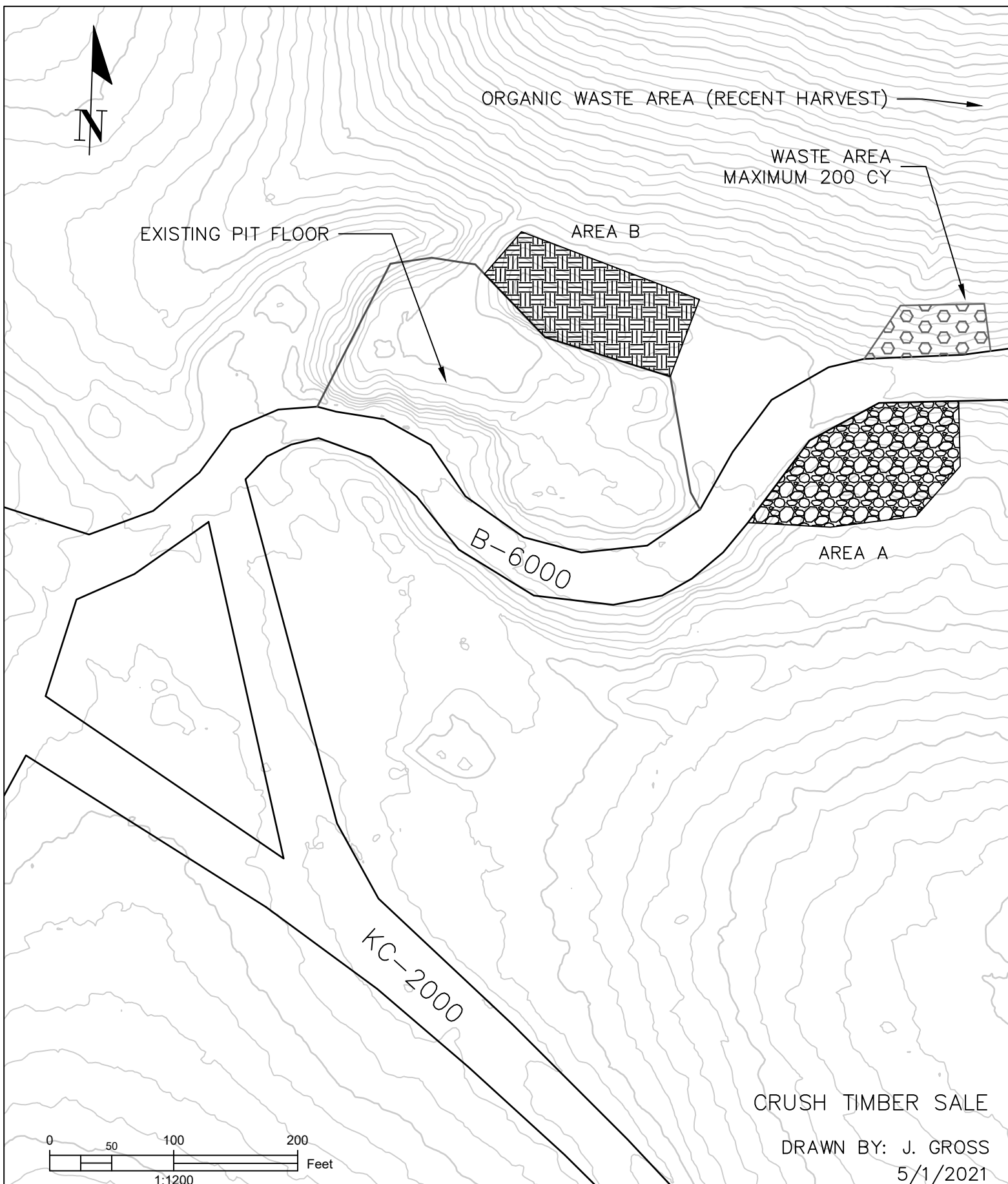
SE ¼ NE ¼, Section 22, Township 18 North, Range 4 West, W.M.

(Page 2 of 3)

11. All operations shall be carried out in compliance with all regulations of:
 - a. “Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations” (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration.
 - b. “Safety Standards for Construction Work” (296-155 WAC) Washington Department of Labor and Industries.
12. The quarry area shall be worked and left in a condition such that future operations may proceed in an orderly manner.
13. The quarry site shall be cleared of all temporary structures, equipment, and rubbish upon completion of rock source operations. The quarry site shall be left in a neat and presentable condition.
14. At the completion of rock source operations, Purchaser shall obtain written approval of final rock source condition and compliance with the terms of this plan from the Contract Administrator.
15. Quantity and quality of material are not guaranteed by the state.

FIVE FORKS QUARRY DEVELOPMENT PLAN

PAGE 3 OF 3



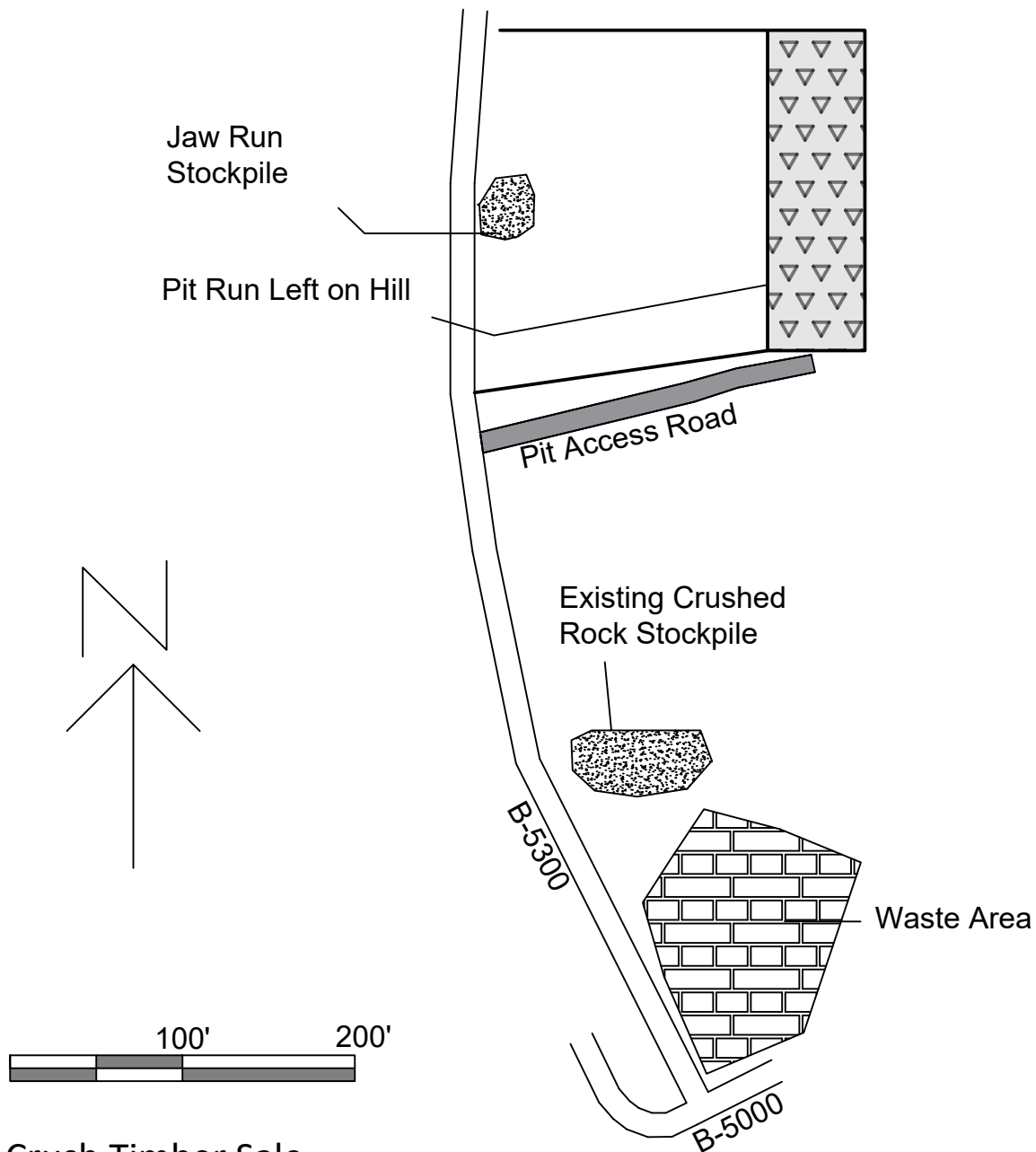
CRUSH TIMBER SALE

DRAWN BY: J. GROSS

5/1/2021

PORTER PASS QUARRY DEVELOPMENT PLAN

SE $\frac{1}{4}$ SW $\frac{1}{4}$ S26 T18N R04W
NE $\frac{1}{4}$ NW $\frac{1}{4}$ S35 T18N R04W



Crush Timber Sale
June 1, 2021
Drawn by: J. Gross

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES SOUTH PUGET SOUND REGION

PORTER PASS QUARRY DEVELOPMENT PLAN
SE ¼ SW ¼ T18N R04W; NE ¼ NW ¼ T18N R04W W.M.

1. Rock for roads shall be obtained from stockpiles shown on Plan Drawing.
2. Quarry faces shall not exceed 35 feet in height and shall have a slope no steeper than ½ (H):1 (V).
3. The width of pit benches shall be a minimum of 1.5 times the maximum length of the largest machine used.
4. The surface of pit floors and benches shall be uniform and free-draining at a minimum 2% outslope gradient.
5. At the end of operations, pit faces and walls shall be scaled and cleared of loose and overhanging material, benches shall have safety berms constructed, and all access blocked to recreational vehicles.
6. All operations shall be carried out in compliance with all regulations of:
 - a. "Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations" (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration.
 - b. "Safety Standards for Construction Work" (296-155 WAC) Washington Department of Labor and Industries.
7. The quarry area shall be worked and left in a condition such that future operations may proceed in an orderly manner.
8. The quarry site shall be cleared of all temporary structures, equipment, and rubbish upon completion of rock source operations. The quarry site shall be left in a neat and presentable condition.
9. At the completion of rock source operations, Purchaser shall ask Contract Administrator for written approval of final rock source condition and compliance with the terms of this plan.

DEPARTMENT OF NATURAL RESOURCES - SOUTH PUGET SOUND REGION

FORM 9-87(Rev. 01-09)

Road Development Cost Estimate

(For internal DNR use only. Costs are estimates only & are not guaranteed by the State or part of the Road Plan.)

REGION: SPS

UNIT: Delphi

SALE/PROJECT NAME: Crush Timber Sale

CONTRACT NUMBER: 30-100998

LEGAL DESCRIPTION:

ROAD NUMBER:	B-7200Ext., B-7212, KC-0123, KC-0127, KC-0128, SR8-1	B-6008, B-7210	B-Line, B-5000, B-5300, B-6000, B-7000, B-7028, B-7200, KC-Line, KC-0100, KC-0120, KC-6500
ROAD STANDARD:	Construction	Reconstruction	Pre-haul maintenance
NUMBER OF STATIONS:	40.59	8.78	702.16
SIDESLOPE:	20-60%	30%	0%
CLEARING AND GRUBBING:	\$7,116	\$527	
EXCAVATION AND FILL:	\$21,297	\$1,545	
MISC. MAINTENANCE:			\$7,888
ROCK TOTALS (Cu. Yds.):			
Ballast	5187	\$81,179	\$7,612
Crushed Rock	1714	\$0	\$15,193
CULVERTS AND FLUMES:	\$14,202	\$1,198	\$2,713
STRUCTURES:	\$0	\$0	\$0
GENERAL EXPENSES:	\$9,903	\$1,088	\$2,321
MOBILIZATION:	\$4,227	\$4,227	\$4,227
TOTAL COSTS:	\$137,923	\$16,197	\$32,342
COST PER STATION:	\$3,398	\$1,845	\$46

ROAD DEACTIVATION AND ABANDONMENT COSTS: \$11,475

NOTE¹: This appraisal has no allowance for profit and risk.

TOTAL (All Roads) = \$197,937

SALE VOLUME MBF = 6,150

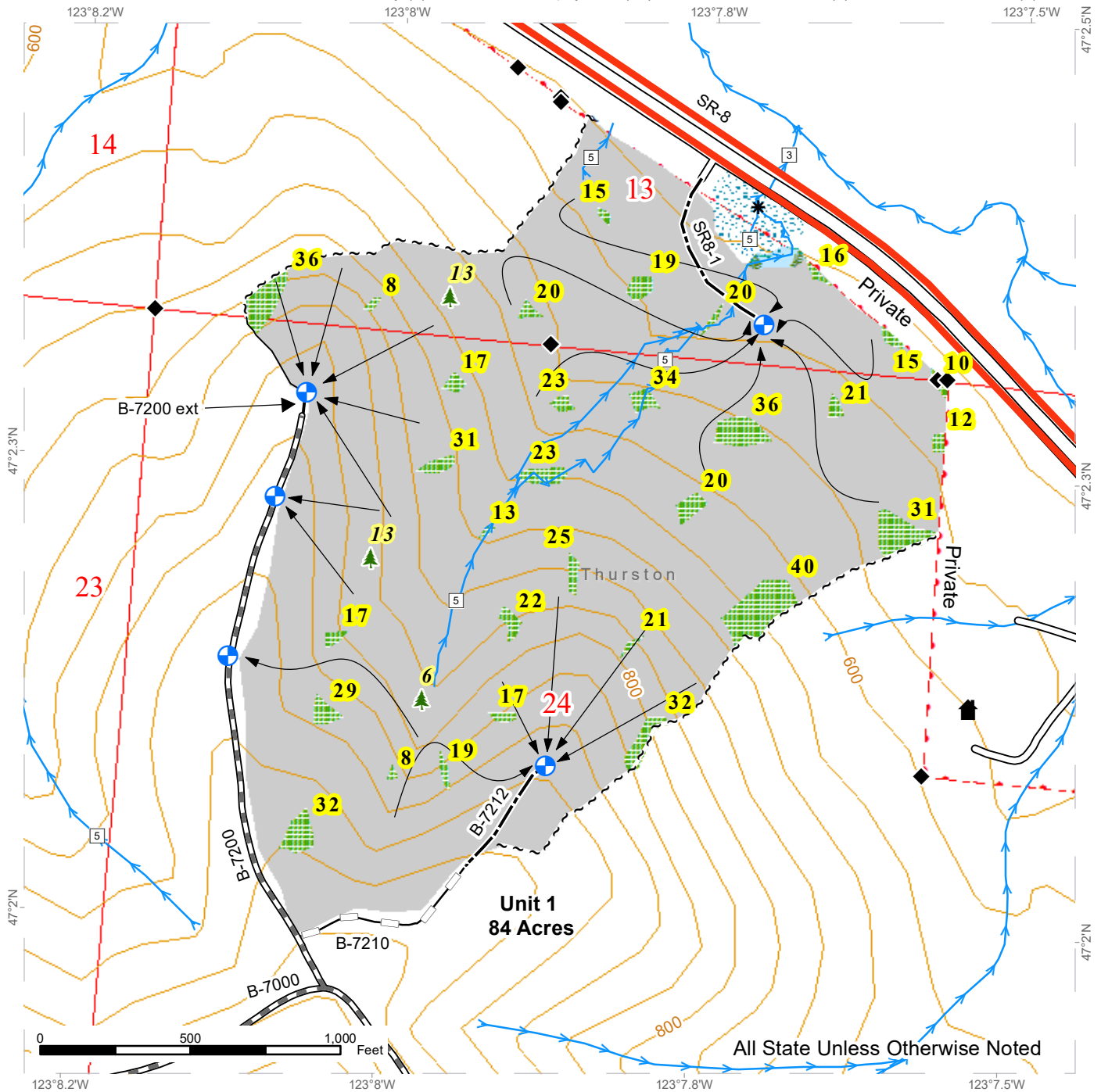
TOTAL COST PER MBF = \$32.18

Date: 08/10/21

LOGGING PLAN MAP

SALE NAME: CRUSH
AGREEMENT#: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Thurston
ELEVATION RGE: 520-1240

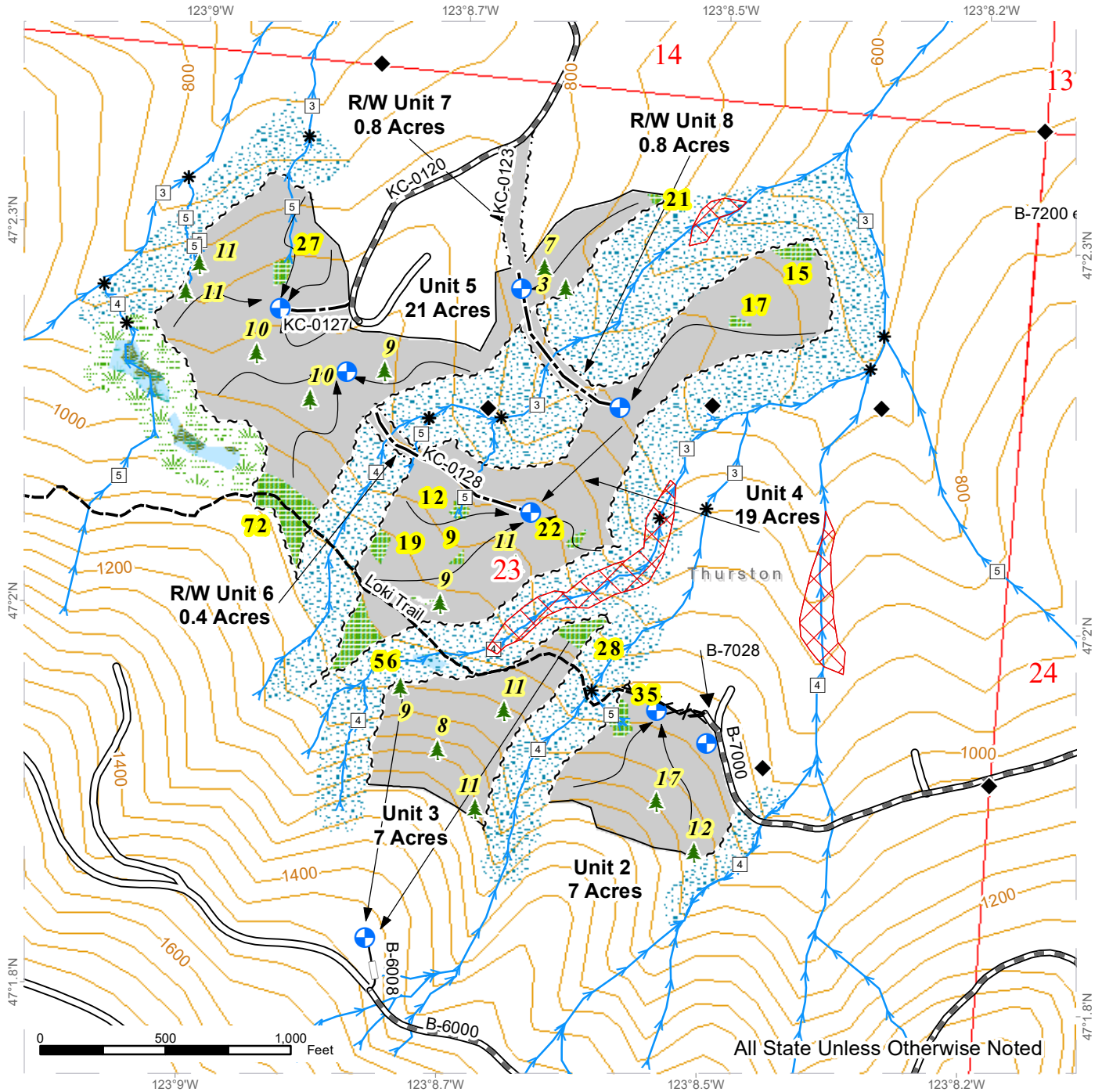


Sale Area	Landing - Proposed	Stream Type
Existing Roads	Leave Tree Area <1/4-acre	Stream Type Break
Required Pre-Haul Maintenance	Structure	Contours 40-foot
Optional Construction	Leave Tree Area	Sale Boundary Tags
Optional Reconstruction	Riparian Mgt Zone	Timber Type Change
Ground Harvest	Forested Wetland	
Cable Harvest	Streams	

LOGGING PLAN MAP

SALE NAME: CRUSH
AGREEMENT#: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Thurston
ELEVATION RGE: 520-1240



Sale Area	Leave Tree Area <1/4-acre	Stream Type
Existing Roads	Leave Tree Area	Stream Type Break
Required Pre-Haul Maintenance	Riparian Mgt Zone	Contours 40-foot
Optional Construction	Forested Wetland	Sale Boundary Tags
Optional Reconstruction	Wetland Mgt Zone	Timber Type Change
Ground Harvest	Motorized Trail	Right of Way Tags
Cable Harvest	Tailhold Restriction Area	Flag Line
Landing - Proposed	Streams	



Name and Address of Applicant: WASHINGTON DNR 950 farman Ave N Enumclaw, WA 98022		Permit Number ACP- 60807	
		State Route 8	Mile Post 14.360 <input checked="" type="checkbox"/> Left <input type="checkbox"/> Right
		Region Olympic	County Thurston
Property Address (If different from above)		Joint Use Connection <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Email audrey.mainwaring@dnr.wa.gov		Primary Tax Parcel Number: 14313340100	
Phone 360-628-3868		Additional Tax Parcel Numbers (if applicable)	
Project Name (if Applicable) <i>Crush Timber Sale</i>		Lot #	Govt. Lot # n/a
Average Weekday Vehicle Trips Ends not to exceed: 100 AWDVTE		Approach width not to exceed 25 feet wide	
Public Land Survey System SE 1/4 of the SW 1/4 of section 13 Township 18 N, Range 4 <input type="checkbox"/> E <input checked="" type="checkbox"/> W			
Permit Category <input checked="" type="checkbox"/> 1 - Minimum Connection <input type="checkbox"/> 2 - Minor Connection <input type="checkbox"/> 3 - Major Connection <input type="checkbox"/> 4 - Temporary Connection		Permit Type <input checked="" type="checkbox"/> Conforming <input type="checkbox"/> Non-Conforming <input type="checkbox"/> Variance	
Current Managed Access Highway Classification <input type="checkbox"/> 1 - 1320' Minimum Approach Spacing Required <input type="checkbox"/> 2 - 660' Minimum Approach Spacing Required <input type="checkbox"/> 3 - 330' Minimum Approach Spacing Required <input type="checkbox"/> 4 - 250' Minimum Approach Spacing Required <input type="checkbox"/> 5 - 125' Minimum Approach Spacing Required			

This Access Connection Permit serves:

Temporary Access for timber harvest and removal of structures and debris. There are three access windows for work related to this permit. One for three weeks to construct improvements to the existing access. One for six months for timber harvest between 11/1/2021 and 10/31/2023 and one for one month for removal of structures and debris to occur within one year of the completion of the timber harvest. DNR shall notify WSDOT a minimum of two weeks prior to each of these windows of work. A 48" black on orange warning sign "Trucks Entering and Leaving Highway" sign shall be installed 1500' before the access. Following the first and second windows, this sign shall be covered or removed and the approached blocked until needed for the next phase. The approach shall be removed following the final phase of work.

This permit is assigned to the parcel(s) listed above, and shall remain assigned to those parcel(s) regardless of any change in ownership of the parcel(s). The parcel(s) served by this permit will be referenced to as the "Permit Holder", and the Washington State Department of Transportation hereinafter will be referred to as the "Department". The Department will allow the Permit Holder to construct, upgrade, use, and/or maintain this access connection provided the Permit Holder accepts all the terms, provisions, and Exhibits attached hereto, and listed below, and by this made a part of this permit.

Exhibit "A" - ACP Specials - 3 pages
 Exhibit "B" - Right-of-Way Plan - 1 sheet
 Exhibit "C" - Site Plan - 1 sheet
 Exhibit "D" - Standard Plans - 4 sheets
 Exhibit "E" - TMC Requirements - 1 sheet
 Exhibit "F" - Traffic Control Plans - 1 sheet
 Exhibit "G" - Driveway Design Template - 1 sheet

By signing below the Permit Holder accepts the terms, provisions, and exhibits attached to and made a part of this permit

PERMIT HOLDER		DEPARTMENT	
Print Name WASHINGTON DNR , <i>Audrey Mainwaring</i>	Print Name Andrew Larson, PE	Print Title: Management Forester	Print Title: Development Services Engineer
Signature <i>Audrey S. Mainwaring</i>	Date <i>7-27-2021</i>	Signature	Date

General Provisions

1. INDEMNIFICATION

The Permit Holder, its heirs, successors and assigns, agrees to indemnify, defend, and hold harmless the State of Washington and its officers, employees, and agents from all claims, demands, damages (both to persons and/or property), expenses, regulatory fines, and/or suits that: (1) arise out of or are incident to any acts or omissions by the Permit Holder, its agents, contractors, tenants, invitees, licensees, and/or employees, in the use of the state highway right-of-way as authorized by the terms of this Permit, and/or (2) are caused by the breach of any of the conditions of this Permit by the Permit Holder, its agents, contractors, tenants, invitees, licensees, and/or employees. The Permit Holder, its heirs successors and assigns, shall not be required to indemnify, defend, or hold harmless the State of Washington and its officers, employees, and/or agents if the claim, suit, or action for damages (both to persons and/or property) is caused by the sole acts or omissions of the State of Washington, its officers, employees, and/or agents; provided that, if such claims, suits, or actions result from the concurrent negligence of (a) the State of Washington, its officers, employees, and/or agents and (b) the Permit Holder, its agents, contractors, tenants, invitees, licensees, and/or employees, or involves those actions covered by RCW 4.24.115, the indemnity provisions provided herein shall be valid and enforceable only to the extent of the acts or omissions of the Permit Holder, its agents, contractors, tenants, invitees, licensees, and/or employees.

The Permit Holder agrees that its obligations under this section extend to any claim, demand and/or cause of action brought by, or on behalf of, any of its employees or agents while performing construction, operation and/or maintenance work authorized by this permit. For this purpose, THE PERMIT HOLDER BY MUTUAL NEGOTIATION HEREBY WAIVES WITH RESPECT TO THE STATE OF WASHINGTON ONLY, ANY IMMUNITY THAT WOULD OTHERWISE BE AVAILABLE TO IT AGAINST SUCH CLAIMS UNDER THE INDUSTRIAL INSURANCE PROVISIONS OF CHAPTER 51.12 RCW.

The Permit Holder further agrees that the proper performance, safe conduct, and adequate policing and supervision of the work authorized by this permit shall not be lessened or otherwise affected by the Department's approval of the plans, specifications, or work authorized by this permit, or by the presence at the work site of Department representatives, or by compliance by the Permit Holder with any requests or recommendations made by such representatives. This indemnification and waiver shall survive the termination of this Permit.

2. REQUIRED PROPERTY RIGHTS

If the parcel(s) served by this permit does not abut the state highway, the Permit Holder must provide legally recorded easements or other property rights that grant a continuous right of access between this parcel(s) and the state highway right-of-way as required by WAC 468-51-030(2). The Permit Holder shall provide copies of these documents to the Department before beginning any work authorized under this permit.

3. PERMIT TYPES

There are three types of Access Connection Permits – Conforming, Non-Conforming, and Variance Access Connection Permits. A brief description of each of these three types of permits is as follows:

- Conforming Access Connection Permits (WAC 468-51-020(4)) meet current Department location, spacing, and design criteria standards at the time of the permit application submittal.
- Nonconforming Access Connection Permits (WAC 468-51-100) do not meet the Department's location and spacing criteria standards at the time of the permit application submittal, but denial would leave the property without reasonable access onto the public road system. Nonconforming Access Connection Permits may continue only until the Department determines that a Conforming Access Connection can be constructed, in such case the Nonconforming Access Connection shall be removed.
- Variance Access Connection Permits (WAC 468-51-105) are a special nonconforming or additional access connection permit issued for a location not normally permitted by Department standards current at the time of permit application. A Variance Access Connection Permit may be issued only after an engineering study demonstrates to the sole satisfaction of the Department, that the connection will not adversely affect the safety, maintenance, or operation of the state highway in accordance with its assigned classification. A Variance Access Connection Permit may only be issued for Class 2 thru Class 5 highways and may remain unless a new permit is required due to changes in property site use or unless the Department modifies, revokes, or closes the permit pursuant to WAC 468-51-120.

4. OTHER PERMITS, FRANCHISE RIGHTS, AND AGREEMENTS

This permit shall not be deemed or held to be an exclusive one and shall not prohibit the Department from granting other permits, franchise rights, and/or agreements or from entering into other permits, franchise rights, and/or agreements of like or other nature with other public or private companies or individuals for the use of the state highway right-of-way, nor shall it prevent the Department from using any of its highways, streets, or public places, or affect its right to full supervision and control over all or any part of them, none of which is hereby surrendered.

5. PERMITS FROM OTHER AGENCIES

The Permit Holder shall be responsible for obtaining all necessary Federal, State, and Local Permits including, but not limited to, Washington State Department of Ecology, Washington State Department of Fish and Wildlife, Washington State Department of Natural Resources, and U.S. Army Corps of Engineers permits or other approvals required prior to beginning any of the work authorized in this permit. The Permit Holder shall defend and hold harmless the State of Washington, its officers and employees, for any fines, costs, or other amounts should the Permit Holder fail to obtain all required permits.

6. PERMIT HOLDER'S REPRESENTATIVE

Should the Permit Holder not be present during any of the work authorized by this permit, the Permit Holder shall designate a representative that has either the legal authority to represent the Permit Holder or the authority to make decisions on behalf of the Permit Holder with respect to the work authorized by this permit. The Permit Holder, at its own expense, shall adequately police and supervise all work authorized by this permit, including but not limited to its contractor, subcontractor, agent, and others, so as not to endanger or injure any person or property. The Permit Holder or the Permit Holder's representative shall be present during any active construction or maintenance work authorized by this permit. Failure to comply with this provision may result in the Department restricting any further work by the Permit Holder within the state highway right-of-way until this requirement is met.

7. PRE-CONSTRUCTION CONFERENCE

The Permit Holder shall not start any construction on state highway right-of-way without first having a preconstruction meeting, which shall be attended by the Department, the Permit Holder or its authorized representative, and the Permit Holder's contractor, if applicable. Unless requested otherwise by the Department, the preconstruction conference shall be onsite at the location of the work authorized by this permit.

8. DEPARTMENT NOTIFICATION

The Permit Holder shall notify the Department a minimum of five (5) working days prior to, including but not limited to: the preconstruction conference; the beginning of any construction work; the implementation of any traffic control plan that closes or restricts a sidewalk, pathway, trail, highway shoulder, or traveled lane of the state highway; submittal of a new or revised traffic control plan; any extension of allowed working hours or days; and the final inspection upon completion of the construction.

Working days, for the purposes of notifying the Department of any work or other activity as authorized by this permit, are the weekdays Monday through Friday, excluding legal holidays.

9. PERMIT DOCUMENTS ON SITE

A complete copy of this permit, protected from the elements, shall be readily available any time active construction work is being performed as authorized by this permit. The permit shall be shown, upon request, to any state representative or law enforcement officer. Failure to comply with this provision may result in the Department restricting any further work by the Permit Holder within the state highway right-of-way until said requirement is met.

10. TRAFFIC CONTROL PLANS

The Permit Holder shall not implement any traffic control plans (TCP) on state highway right-of-way without the Department's prior written approval. It is the Permit Holder's responsibility to plan, conduct, and safely perform the work authorized by this permit. Should additional TCP's be needed for the construction and/or maintenance of the work authorized by this permit, the Permit Holder shall submit work-specific traffic control plans to the Department for review and written approval.

A wide range of pedestrians might be affected by traffic control zones, including the young, elderly, and people with disabilities such as hearing, visual, or mobility. Bicyclists may also be impacted. The Permit Holder shall implement all reasonable means of traffic control necessary to adequately accommodate these needs if they can be reasonably expected to be encountered during the work authorized by this permit.

All traffic control plans shall be in compliance with the current editions of the Washington State Department of Transportation (WSDOT) Work Zone Traffic Control Guidelines and Federal Highway Administration-approved Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways.

Transportation (WSDOT) Work Zone Traffic Control Guidelines and Federal Highway Administration-approved Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways.

The WSDOT Work Zone Traffic Control Guidelines (M54-44) may be accessed at:
<http://www.wsdot.wa.gov/Publications/Manuals/M54-44.htm>

The MUTCD, including modifications for Washington State, may be accessed at:
<http://www.wsdot.wa.gov/Operations/Traffic/mutcd.htm>

11. CHANGES TO TRAFFIC CONTROL PLANS

The Department reserves the right to immediately modify, suspend, or revoke any traffic control plan or work authorized under this permit, including but not limited to lane closures and shoulder closures due to unexpected conditions or other circumstances which the Department determines is in the best interests of the state and/or safety of the traveling public. All costs associated with a modification, suspension, or revocation shall be borne solely by the Permit Holder. The Department shall in no way be held liable for any delays, costs, or other damages to the Permit Holder by reason of any such Department action.

12. TRACKING OF MATERIAL

The Permit Holder shall maintain the surface of the access connection to prevent the tracking of material onto any portion of the state highway, including the traveled lanes and shoulders of the highway. Any tracking of material onto the highway, such as mud or debris, shall be immediately cleaned up by the Permit Holder in accordance with RCW 46.61.655. Should the Permit Holder fail to immediately correct or clean up material tracked onto the state highway after receiving written notice from the Department, the Department reserves the right to perform the necessary work to preserve the state highway right-of-way or for the protection of the traveling public or pedestrians. If the Department performs the work as provided herein, the Permit Holder agrees to make payment to the Department within thirty (30) calendar days of the date of the Department's detailed invoice. If the Department chooses not to perform the work, the Department may initiate an action to revoke this permit as provided as provided by WAC 468-51.120.

13. EROSION AND SEDIMENTATION CONTROL

The Permit Holder shall comply with the Washington State Department of Transportation Highway Runoff Manual (HRM) and implement Best Management Practices (BMP's) to reduce erosion, trap sediment, and ensure that sediment-laden water does not leave the work site. The HRM establishes minimum requirements and provides uniform technical guidance for avoiding, minimizing, and/or mitigating potential water resource impacts. All water discharges to or from the state highway right-of-way due to the work activities authorized by this permit shall conform to all applicable federal, state, and local water quality regulations.

The Washington State Department of Transportation Highway Runoff Manual, M31-16, may be accessed at:
<http://www.wsdot.wa.gov/Publications/Manuals/M31-16.htm>

14. CULTURAL RESOURCES

If any archaeological or historical resources are revealed due to the work authorized under this permit, the Permit Holder shall immediately stop work and notify the Department's representative and retain a United States Government Secretary of the Interior's qualified archaeologist. Said archaeologist shall evaluate the site and make recommendations to the Department regarding the continuation of the work.

15. UTILITY IMPACTS

All manholes, valve covers, catch basins, utility boxes, or other similar utility appurtenances impacted by the work authorized in this permit that do not require a separate Department Utility Permit or Utility Franchise shall be constructed, modified, or repaired to match the highway shoulder slope and if outside the highway shoulder shall match the adjacent terrain as required by the Department. Any Department inspection or concurrence of this work shall be for the sole benefit of the Department and not for the Permit Holder or any third party. The Permit Holder shall make a timely application

for any Department-issued Utility Permit, Utility Franchise, or an amendment to an existing utility permit or franchise. Failure to obtain any required Utility Permit, Utility Franchise, or an amendment to an existing utility permit or franchise in a timely manner may result in the Department delaying the work authorize by this permit until such time that the require documents are obtained. The Permit Holder agrees on behalf of itself, its successors, assigns, tenants, invitees, licensees, contractors, agents and/or employees, that the Department shall in no way be held liable for any delays, costs, or other damages to the Permit Holder or its successors, assigns, contractors, tenants, invitees, licensees, employees and/or agents by reason of any action taken by the Department pursuant to this section.

Additional guidance in accommodating utilities within state highway right-of-way may be found in the current editions of the Washington State Department of Transportation (WSDOT) Utilities Accommodations Manual M22-86 and WSDOT Utilities Manual M22-87.

The WSDOT Utilities Accommodations Manual, M22-86, may be accessed at:

<http://www.wsdot.wa.gov/Publications/Manuals/M22-86.htm>.

The WSDOT Utilities Manual, M22-87, may be accessed at:

<http://www.wsdot.wa.gov/Operations/Traffic/mutcd.htm>

16. SURVEY MONUMENTS

The Permit Holder shall not disturb, remove, or destroy any existing survey Monument before first obtaining a Washington State Department of Natural Resources (DNR) permit. The Permit Holder further agrees that all Department control and alignment monuments may not be disturbed, removed, or destroyed unless specifically authorized by this permit or pursuant to the Department's prior written approval. Any reset survey Monument shall be set by or under the direct supervision of a Professional Land Surveyor who has an active professional license with the State of Washington. A listing of Survey Monuments may be accessed at the Department's Geographic Services Office Website:

<http://www.wsdot.wa.gov/monument/searchBroad.aspx>

17. DELAY TO DEPARTMENT WORK

All work authorized by this permit shall be done in such a manner by the Permit Holder as will cause the least interference with any of the Department's or its contractor's work on the state highway. The Permit Holder agrees on behalf of itself, its successors, assigns, tenants, invitees, licensees, contractors, agents and employees, that the Department shall in no way be held liable for any delays, costs, or other claims or damages by the Permit Holder or its successors, assigns, tenants, invitees, licensees, contractors, agents and/or employees occasioned by the Department's or its contractor's work on the state highway right of way.

18. MATERIALS AND WORKMANSHIP

All material and workmanship shall conform to the current edition of the Washington State Department of Transportation Standard Specifications for Road, Bridge and Municipal Construction, and amendments thereto, and shall be subject to inspection and concurrence by the Department. Any Department inspection or acceptance shall be for the sole benefit of the Department and not for the Permit Holder or any third party.

The Washington State Department of Transportation Standard Specifications for Road, Bridge and Municipal Construction (M41-10) may be accessed at: <http://www.wsdot.wa.gov/Publications/Manuals/M41-10.htm>

19. PERMIT MODIFICATIONS, AMENDMENTS, CHANGES AND/OR CORRECTIONS

The Department reserves the right to require permit modifications, amendments, changes and/or corrections should the authorized construction not conform with the Department's current Standard Specifications for Road, Bridge, and Municipal Construction, Department's Standard Plans, Department's Design Manual, the permit Special Provisions and/ or if unexpected construction site conditions are encountered prior to or during the performance of the work authorized by this permit. The Permit Holder is required to obtain the Department's prior review and written approval for any proposed changes to the permit. Permit Holder agrees on behalf of itself, its successors, assigns, tenants, invitees, licensees, contractors, agents and employees, that the Department shall in no way be held liable for any delays, costs, or other claims or damages to the Permit Holder or its successors, assigns, tenants, invitees, licensees, contractors, agents and/or employees, should the Department require any modifications, amendments, changes and/or corrections to the permit.

20. STORAGE OF EQUIPMENT AND MATERIALS

The Permit Holder shall not place or store any equipment and/or materials within the state highway right-of-way unless specifically authorized by this permit or in writing by the Department, and any placement or storage of any equipment and/ or materials, if allowed, shall only be during the active construction phase of the work authorized by this permit.

21. CONSTRUCTION AND MAINTENANCE WORKING DAYS – SUSPENSION OF WORK

The Permit Holder shall not perform work on a Saturday, Sunday or a legal holiday, unless specified elsewhere in this permit or by the Department in writing. RCW 1.16.050 lists the following days as the observed legal holidays and their common names:

- First day in January - New Year's Day
- Third Monday of January - Martin Luther King Jr's Birthday
- Third Monday of February - President's Day
- Last Monday of May - Memorial Day

- Fourth day of July – Fourth of July
- First Monday in September - Labor Day
- Eleventh day of November - Veterans' Day
- Fourth Thursday in November – Thanksgiving Day and the day immediately following
- Twenty-fifth day of December - Christmas Day

22. FAILURE TO COMPLETE WORK IN A TIMELY MANNER

The Permit Holder agrees to complete the work authorized by this permit within 120 days, unless an extension of time is granted in writing by the Department. Should the Permit Holder fail to complete the work within the approved time limit, the Department shall determine what work must be completed to restore the state highway right-of-way back to a condition and configuration that is safe for public use. Should the Permit Holder fail to immediately finish the work authorized by this permit or to restore the state highway right-of-way back to a condition and configuration that is safe for public use after receiving written notice of the deficiency from the Department, the Department reserves the right to perform the necessary work to preserve the state highway for public use and for the safety of the traveling public. If the Department performs the work, the Permit Holder agrees to make payment to the Department within thirty (30) calendar days of the date of the Department's detailed invoice. If the Department chooses not to perform the work, the Department may initiate an action to revoke this permit as provided as provided by WAC 468-51.120, as well as recover all costs associated with restoring the state highway right-of-way.

23. FINAL INSPECTION AND SURETY RELEASE

All work on state highway right-of-way is subject to ongoing monitoring and inspection by the Department solely for the benefit of the Department and not for the Permit Holder or any third party. Upon completion of the work authorized by this permit, including the removal of all construction related rubbish and debris, the Permit Holder shall request a final inspection from the Department's representative. Only upon the Department's inspection and concurrence of the work authorized by this permit will the Department release the surety, if any, that was made a condition of this permit, provided all other conditions related to the surety have been met.

24. ON-GOING MAINTENANCE OF ACCESS CONNECTION

The Permit Holder, its successors or assigns, shall be responsible for maintaining the access connection and related appurtenances between the state highway edge of shoulder and the state highway right-of-way line, including but not limited to, pavement surface, culverts, catch basins, earthen embankment slopes above and below the access connection, vegetation growth that impacts traffic and pedestrian sight lines and sight distance, the removal of snow or other material that may be tracked onto the access such as mud and debris, and mail boxes.

The Permit Holder shall correct any maintenance deficiency within thirty (30) consecutive calendar days upon discovery or Department written notice, unless the Department authorizes in writing a different time period. Should the Permit Holder fail to correct a deficiency, after receiving written notice of the deficiency from the Department, the Department reserves the right to perform the necessary maintenance work to preserve the state highway right-of-way or for the protection of the traveling public or pedestrians. If the Department performs maintenance work as provided herein, the Permit Holder agrees to make payment to the Department within thirty (30) calendar days of the date of the Department's detailed invoice. If the Department chooses not to make the repair, the Department may initiate an action to revoke this permit as provided as provided by WAC 468-51.120.

25. STORMWATER AND DRAINAGE MAINTENANCE

The Permit Holder shall construct and maintain the access connection such that no stormwater runoff is directed onto the paved surface of the state highway traveled lanes and shoulders. Curbing or other drainage features may be required if the grade beyond the edge of shoulder is flat or slopes toward the state highway pavement such that any stormwater runoff on the access connection would flow onto the traveled lanes and shoulder of the state highway.

The Permit Holder shall be responsible to maintain all culverts and catch basins associated with this permit and shall provide all necessary ongoing maintenance to keep those culverts and catch basins free-flowing and clear of all obstructions in accordance with the provisions of Section 24.

The Permit Holder shall not interfere with the conveyance and/or treatment of the existing highway stormwater drainage system. If the work performed in any way adversely interferes with existing state highway stormwater drainage, including the treatment and/or conveyance of stormwater, the Permit Holder shall immediately correct its drainage impacts on the state highway at its own expense after receipt of the Department's written notice. Such work as required by the Department shall be inspected and concurred to by the Department. Any Department notice, requirement, inspection and/or concurrence shall be solely for the benefit of the state and not for the Permit Holder or any other third party. Should the Permit Holder fail to immediately maintain or correct any stormwater conveyance, drainage, or treatment deficiency

after receiving written notice of the deficiency from the Department, the Department reserves the right to perform the necessary work to preserve the state highway right-of-way or for the protection of the traveling public or pedestrians. If the Department performs the work as provided herein, the Permit Holder agrees to make payment to the Department within thirty (30) calendar days of the date of the Department's detailed invoice. If the Department chooses not to perform the work, the Department may initiate an action to revoke this permit as provided as provided by WAC 468-51.120.

26. RIGHT-OF-WAY VEGETATION MAINTENANCE

The Permit Holder shall not cut, spray, retard, remove, destroy, damage, disfigure or in any way modify the physical condition of any vegetative material located within the state highway right-of-way for any reason, except for the work specifically detailed, shown, and authorized in this permit. If it becomes necessary to increase the sight lines and sight distance at this access connection for safety purposes, the Permit Holder shall contact the Department to obtain prior written approval for any vegetative material modification located on the state highway right-of-way, including obtaining the Department's prior written authorization for vegetative material modification to provide Permit Holder property sign or facility visibility from the state highway. This includes any modifications to the earthen embankment on either side of the access connection. The unauthorized cutting of timber or damage to the vegetative material is prohibited. Criminal penalties may apply under RCW 47.40.080. Civil penalties may apply under RCW 4.24.630. The Permit Holder agrees that it shall perform all restoration work at its sole cost and expense to the satisfaction of the Department.

27. FUTURE ACCESS PERMIT MODIFICATIONS BY THE DEPARTMENT AND RIGHT OF ENTRY

In the Department's sole discretion as part of its highway work program, existing permitted access connections may require modification, relocation, or replacement in order to meet current Department design standards. The Department shall be responsible to perform such modifications, relocations, or replacements at the Department's sole cost and expense. The Permit Holder hereby authorizes the Department to enter upon its lands only where necessary to modify, relocate, or replace all or a portion of the permitted access connection and to maintain traffic control devices and appurtenances associated with the Department's work performed on or near the permitted access connection.

Should the Permit Holder request that further enhancements or modifications be added to the Department's work, the Department, at its sole option, may allow the further enhancements or modifications be added to its work program provided all costs to perform the additional enhancements or modifications is at the sole expense of the Permit Holder. The Permit Holder agrees to remit the estimated costs of the work to the Department before the Department will perform the additional enhancement or modification work. The Department agrees to reimburse the Permit Holder for monies paid but not used for the work within thirty (30) calendar days after the work is performed. The Permit Holder agrees to reimburse the Department for all additional costs should they exceed the estimated cost paid within thirty (30) calendar days after receipt of a detailed Department notice.

28. FUTURE ACCESS MODIFICATIONS BY THE PERMIT HOLDER

The Permit Holder shall immediately notify the Department of any changes made or proposed in the use, intensity of development, type of traffic, or traffic flow of the property or properties served by this access connection permit. The Department may require further traffic analyses by the Permit Holder if the change is significant that would require a new access connection permit and/or modifications to the access connection. The cost of a modification to this access connection shall be the sole responsibility of the Permit Holder, including the cost of modification of any access connection required as a result of changes to property site use in accordance with WAC 468-51-110, except as provided in Section 17 of this permit.

29. MODIFICATION OR REVOCATION OF PERMIT OR CLOSURE OF ACCESS CONNECTION

In addition to other provisions of this permit, the Department may initiate an action to modify, revoke, or close this permit in accordance with the specific terms of WAC 468-51-110 and 468-51-120, including if:

- Significant changes have occurred in the use, design, or traffic flow of the property or of the state highway, requiring the relocation, alteration or closure of the access connection, or
- The connection was not constructed at the location or to the design specified in the permit, or
- The permit provisions were not met, or
- The connection causes a safety, maintenance, and/or operational problem on the state highway system.

The Permit Holder may have appeal rights as provided under WAC 468-51-150. In addition, WAC 468-51-120(3) authorizes the Department to take immediate remedial action, including the closure of an access connection, if there is an immediate and serious danger to the public health, safety, and welfare, in compliance with chapter 47.32 RCW. This permit is also subject to any and all causes of revocation as allowed by state laws, as amended.

30. ASSIGNMENT OF PERMIT

This permit is assigned to the identified parcel(s) served by the access connection and shall remain appurtenant to the identified parcel(s). Should the identified parcel(s) be inherited, sold, assigned, or transferred in any way, this permit shall run with the land to the extent that the identified parcel(s) remain in compliance with the terms of this permit, unless the permit is revoked, modified, or closed by the Department as provided by law or the current Permit Holder requests the cancellation of the permit and closure of the access.

31. HIGHWAY ADVERTISING CONTROL

No signs shall be placed on state highway right-of-way. Any advertising adjacent to the state highway shall be in compliance with the Scenic Vistas Act of 1971, chapter 47.42 RCW and chapter 468-66 WAC.

32. APPLICABLE WAC's AND RCW's

In addition to the specific state laws and rules identified in this permit, this permit is also subject to all applicable provisions of chapters 468-51 and 468-52 WAC, and chapters 47.32, 47.44, and 47.50 RCW, and amendments thereto.

33. AMERICANS WITH DISABILITIES ACT

This permit is subject to all applicable provisions of the United States Government American's with Disabilities Act (ADA). Any current or future work shall comply with all applicable ADA requirements in effect at the time of the work

EXHIBIT “A”



Permit No. 60807

Applicable provisions are denoted by (✓)

- ☒ 1. No work provided by this permit shall be performed until the Permit Holder is authorized by the following WSDOT representative:

Area 4 Maintenance
Aberdeen Maintenance Facility
4801 Olympic Highway
Aberdeen, WA 98520
360-538-8530
As of March 2021:
Brent Schiller - Maintenance Superintendent

- ☒ 2. The Permit Holder shall only perform the construction work authorized by this permit during the following work hours:

There are no work hour restrictions and weekend work is allowed, except per General Provision #21 when no work and no traffic control is allowed during Holidays or Holiday weekends, except for traffic control needed to secure the work area. WSDOT also reserves the right to restrict or prohibit any traffic control operations when WSDOT must implement or allow other traffic control for whatever reasons WSDOT considers to be of a higher priority.

- ☒ 3. The Permit Holder, unless specified otherwise in this permit, shall only implement the Traffic Control Plans approved for this permit during the following work hours:

There are no traffic control work hour restrictions and weekend work is allowed, except per General Provision #21 when no work and no traffic control is allowed during Holidays or Holiday weekends, except for traffic control needed to secure the work area. WSDOT also reserves the right to restrict or prohibit any traffic control operations when WSDOT must implement or allow other traffic control for whatever reasons WSDOT considers to be of a higher priority.

- ☒ 4. **Pre-Paving Inspection**

The Permit Holder shall contact WSDOT to request a pre-paving inspection prior to paving any Hot Mix Asphalt (HMA) or Bituminous Surface Treatment (BST). No paving shall occur without first receiving WSDOT's prior written approval to pave. Failure to obtain this approval may result in WSDOT directing the Permit Holder to remove, repair, and/or add more paving at the Permit Holder's sole cost and expense.

The pre-paving inspection is required to permit WSDOT to verify that the paving, before it is placed, will meet WSDOT's design requirements for the access connection. Items to be inspected include, but are not limited to, paving limits, culvert placement, material installation, side slopes, and grading of the access connection to

ensure that stormwater will not flow onto the existing state highway pavement after the access connection paving is completed.

☒ **5. Paved Access Connection**

The Access Connection shall be constructed with the following materials, listed from top lift to bottom lift. The thicknesses shown are minimum requirements, as additional material may be necessary to properly construct the access connection.

☒ See Exhibit " F " for design details and paving requirements

3 inches of Mix Asphalt (HMA)

☐ Bituminous Surface Treatment (BST), also known as chipseal
inches Crushed Surfacing Top Course (CSTC)

6 inches Crushed Surfacing Base Course (CSBC)
inches of Rock Cap

☐ Geotextile for separation or soil stabilization

☐ **6. Gravel Access Connection**

The Access Connection shall be constructed with the following materials, listed from top lift to bottom lift. The thicknesses shown are minimum requirements. WSDOT may require additional material as necessary to properly construct the access connection.

☐ See Exhibit " " for additional design details and gravel requirements

inches Crushed Surfacing Top Course (CSTC)

inches Crushed Surfacing Base Course (CSBC)

inches of Quarry Spalls

inches of Rock Cap

☐ Geotextile for separation or soil stabilization

☐ **7. Culvert Installation**

The access connection shall include the installation of a culvert installed in a straight line and with a grade that matches the existing grade of the highway ditch or swale such that the existing conveyance of stormwater will not be adversely impacted. The culvert to be installed shall be

18 inch minimum diameter culvert

☐ **8. Culvert Beveled End Treatments**

The open ends of the culvert run shall be beveled to match the existing slopes of the ditch or swale and access connection fill material.

☐ **9. Culvert End Treatments – Quarry Spalls**

Quarry spalls shall be placed around the open ends of the culvert. The quarry spalls shall be placed below, along the sides, and on the top of the open end of the culvert for a minimum length of two (2) feet in all directions

☐ **10. Gated and Locked Access**

This access connection shall be gated and locked when not in active use.

☐ **11. Access Connection for Emergency Use Only**

This access connection is for emergency use only and shall be gated and locked at all times to the general public.

☐ **12. Temporary Access Connection**

This is a temporary access connection that shall be immediately closed and removed by the Permit Holder when no longer needed, or by the date listed below, whichever comes first:

When the access connection is removed, the Permit Holder shall restore the state highway right-of-way to its original condition, including reseeding if required. Failure by the Permit Holder to remove the access

connection as specified herein may result in WSDOT removing the access connection at the Permit Holder's expense.

☐ **13. Surety**

To ensure proper compliance with all terms and conditions of this permit, a surety amount in the form of a Bond, Assignment of Escrow, Certificate of Deposit, Irrevocable Letter of Credit, Check or Money Order shall be provided to WSDOT in the amount listed below. If a bond is provided, it shall be written by a surety company authorized to do business in the State of Washington.

The surety amount shall be:

The surety bond shall remain in force until all work under this permit has received final concurrence by WSDOT, and WSDOT issues a written release of the surety bond.

☐ **14. This is a Non-Conforming Access Connection Permit:**

Nonconforming Access Connection Permits (WAC 468-51-100) do not meet WSDOT's location and spacing criteria standards at the time of the permit application submittal, but denial would leave the property without reasonable access onto the public road system. Nonconforming Access Connection Permits may continue only until WSDOT determines that a Conforming Access Connection can be constructed, in such case the Nonconforming Access Connection shall be removed.

☐ It does not meet the minimum spacing from another adjacent driveway or public road intersection of:

☐ 125 feet ☐ 250 feet ☐ 330 feet ☐ 660 feet ☐ 1320 feet

☐ It does not meet the minimum corner clearance standards of WAC 468-52-040(6) of

☐ 75 feet ☐ 100 feet ☐ 115 feet ☐ 125 feet ☐ 230 feet

☐ It exceeds the number of access points for one parcel or contiguous parcels under the same ownership by one or more additional access connections.

☐ The existing topography, site conditions, and/or wetland or stream restrictions and buffers prevent the access to be constructed to current standards.

Therefore, this access connection shall only continue until such time that a conforming access connection can be constructed or another access to the local street system becomes available and is permitted. Variance Access Connection Permits are only issued on Class 2 through 5 highways.

☐ **15. This is a Variance Access Connection Permit:**

Variance Access Connection Permits (WAC 468-51-105) may be issued, at the discretion of WSDOT, for certain connections not meeting the access classification location and spacing or that exceed the number of connections allowed by the standards adopted for a particular highway segment.

☐ It does not meet the minimum spacing from another adjacent driveway or public road intersection of:

☐ 125 feet ☐ 250 feet ☐ 330 feet ☐ 660 feet

☐ It does not meet the minimum corner clearance standards of WAC 468-52-040(6) of:

☐ 75 feet ☐ 100 feet ☐ 115 feet ☐ 125 feet ☐ 230 feet

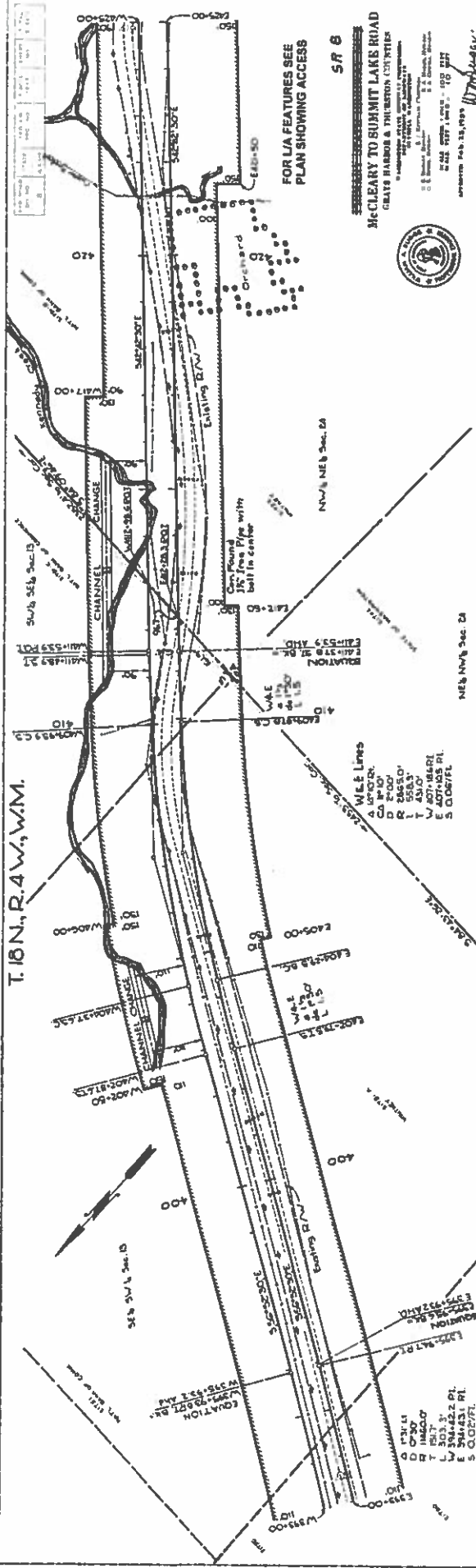
☐ It exceeds the number of access points for one parcel or contiguous parcels under the same ownership by one or more additional access connections.

☐ The existing topography, site conditions, and/or wetland or stream restrictions and buffers prevent the access to be constructed to current standards.

Therefore, this access connection shall only continue until such time that a conforming access connection can be constructed or another access to the local street system becomes available and is permitted.

EXHIBIT “B”

T. 18 N., R. 4 W., W.M.



FOR LIA FEATURES SEE
PLAN SHOWING ACCESS

SR 8

McCLEARY TO SUMMIT LAKE ROAD
GLENN HARBOR & THURSTON COUNTIES



DESIGNED BY
ENGINEER
APPROVED
DATE

FOR E. OF W. MEET 12 OF 16 SHEETS
This sheet supercedes sheet 12
of 16 sheets of same title
approved July 29, 1958

W LINE PROFILE

E LINE PROFILE

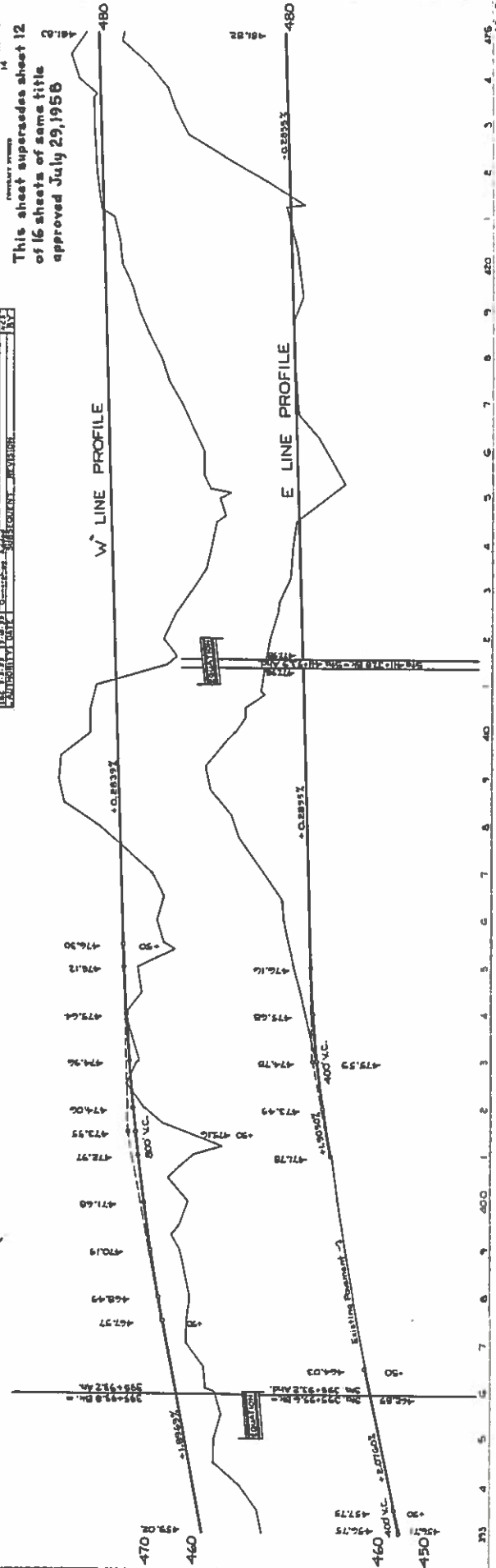
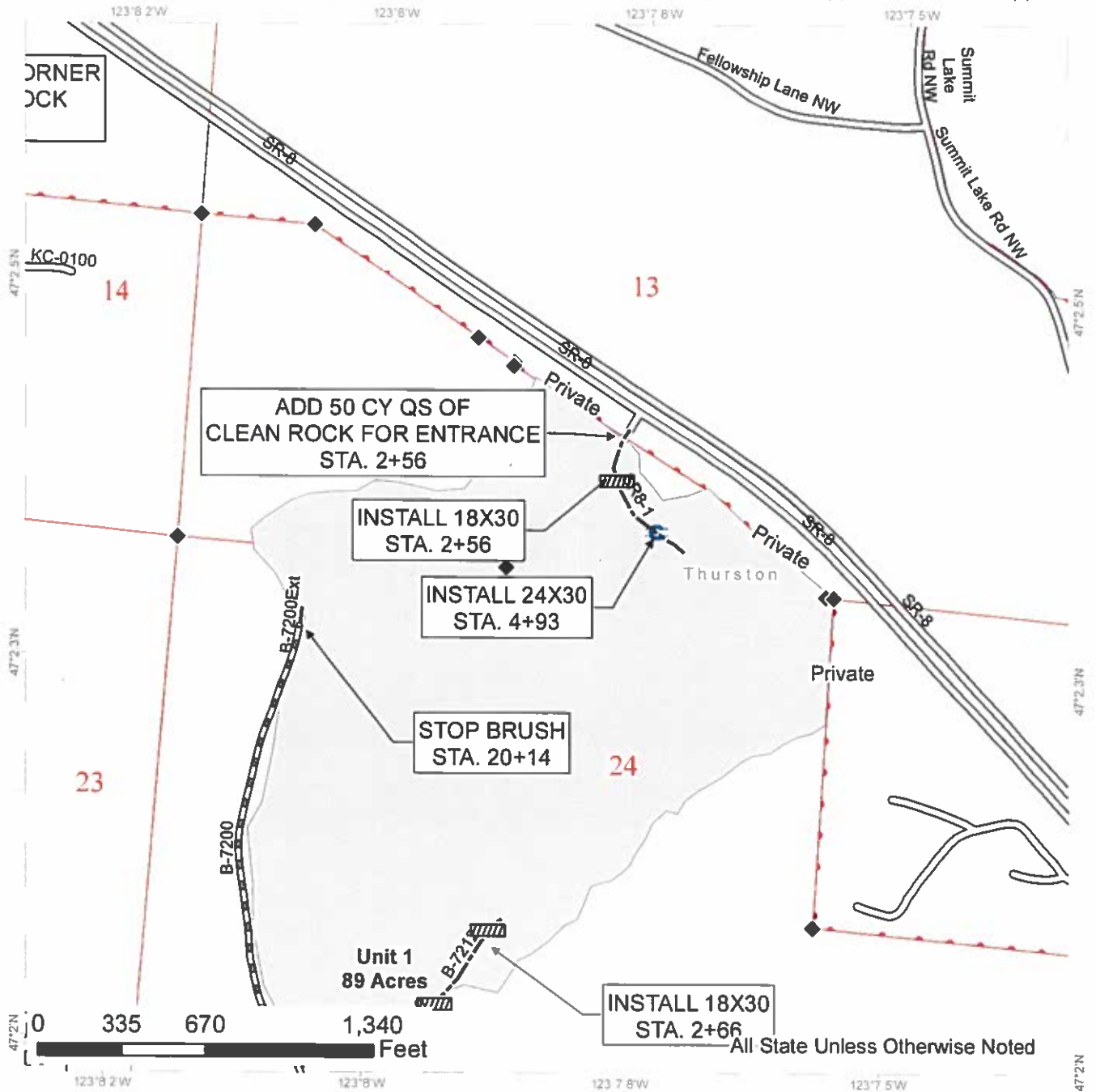


EXHIBIT “C”

SALE NAME: CRUSH
AGREEMENT#: 30-100998
TOWNSHIP(S): T18R4W
TRUST(S): Common S

REGION: South Puget Sound Region
COUNTY(S): Thurston
ELEVATION RGE: 520-1240
 Forest Purchase (2), State Forest Transfer (1)














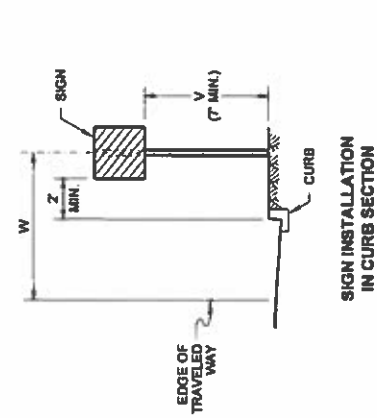
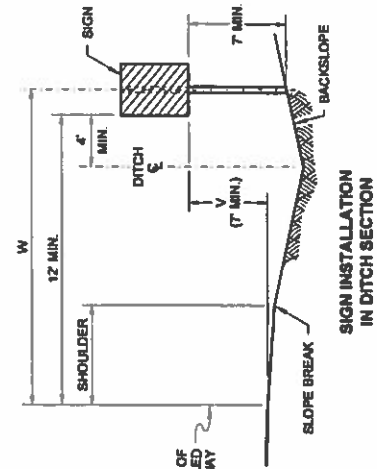
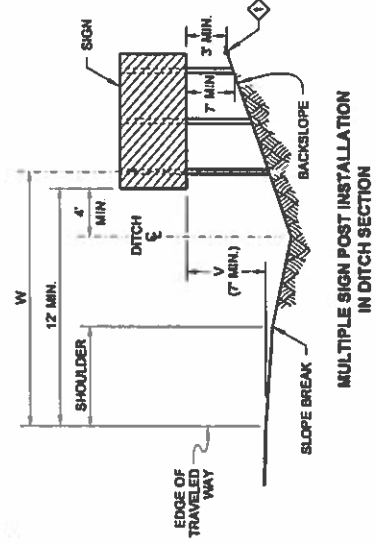
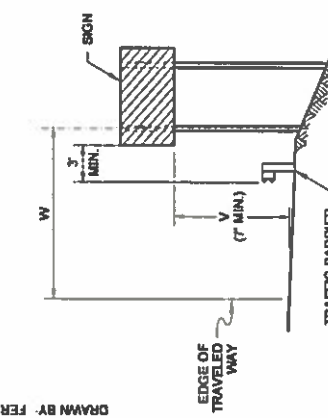
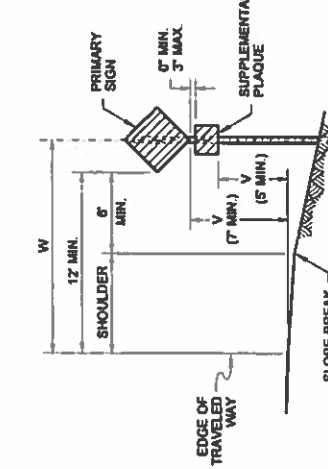
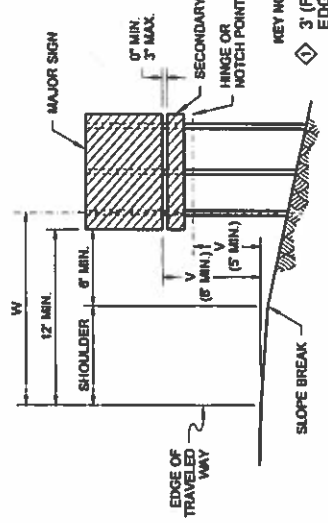
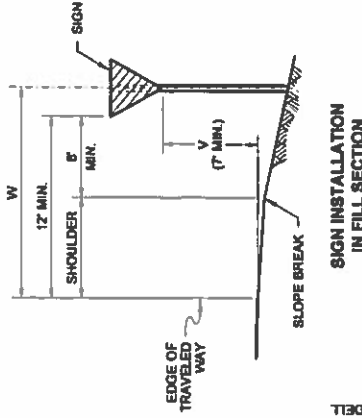
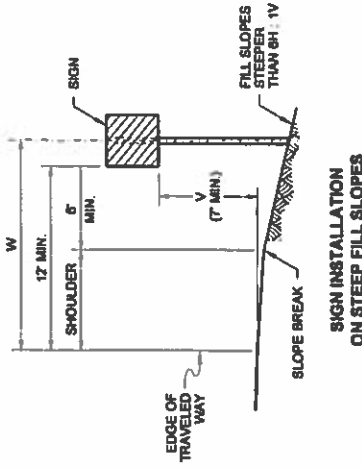
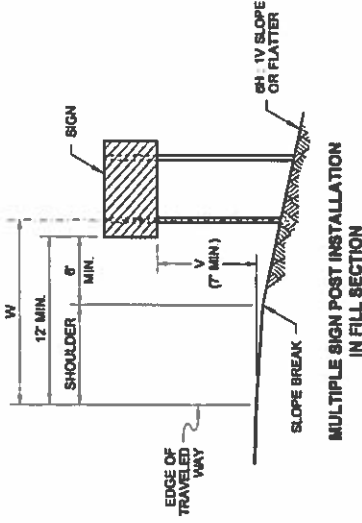
- | | | | |
|---|-------------------------------|---|------------------------------|
|  | Existing Roads |  | Timber Sale Units |
|  | Required Pre-Haul Maintenance |  | Public Land Survey Townships |
|  | Optional Construction |  | Public Land Survey Sections |
|  | Optional Reconstruction |  | Survey Monument |
|  | Cross Drain |  | DNR Managed Lands |
|  | Culvert | | |

EXHIBIT “D”

NOTES

1. Refer to the Sign Specification Sheet of the Contract for the 'V' and 'W' distances.
2. The minimum vertical distance from the bottom of the sign to the ground shall not be less than 7' (6') for signs located within the Design Clear Zone.



John C. Nisbett
Jun 22 2015 9:43 AM

GROUND-MOUNTED SIGN PLACEMENT **STANDARD PLAN G-20.10-02**

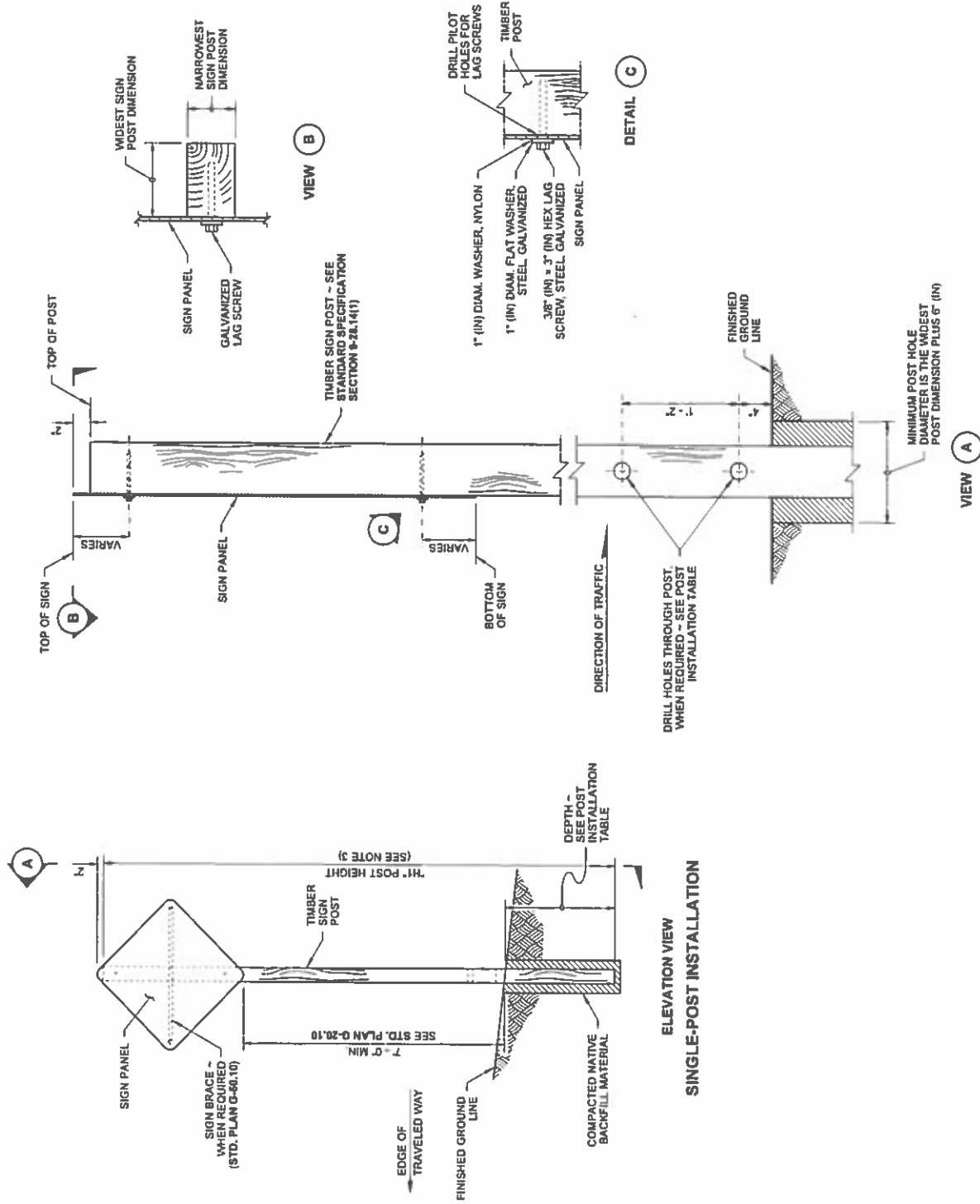
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Jun 23 2015 7:35 AM

STATE DESIGN ENGINEER
Washington State Department of Transportation

NOTES

1. Notch is only required with multiple post installations.
2. 6x10, 8x10, and 6x12 Timber Sign Posts cannot be made breakaway and do not have holes or notches. These posts shall not be installed within the Design Clear Zone. They may be installed behind traffic barrier.
3. For "X", "Y", "H1", "H2", "H3", and "H4", refer to the Sign Specification Sheet in the Contract.
4. For 6x6 posts and larger, 7' (ft) minimum spacing is required between posts.
5. All materials shall meet the requirements of Standard Specification Section 9-28.



POST INSTALLATION TABLE				
POST SIZE (INCHES)	DEPTH	HOLE DIAMETER	NOTCH DEPTH (SEE NOTE 1)	
4x4	3'-0"	NOT REQ'D	NOT REQ'D	
4x6	4'-0"	1 1/2"	1 1/2"	
6x6	4'-0"	2"	2"	
6x8	5'-0"	3"	3"	
6x10	6'-0"	SEE NOTE 2	SEE NOTE 2	
6x12	7'-0"	SEE NOTE 2	SEE NOTE 2	



Nisbet, John
Digitally signed by Nisbet, John
Date: 2016.08.27 11:29:48
-07'00'

TIMBER SIGN SUPPORT
STANDARD PLAN G-22.10-04

SHEET 1 OF 3 SHEETS
APPROVED FOR PUBLICATION
C. Nisbet, J.E.T.
Jan 25 2011 10:47 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation



Nisbet, John
Digitally signed by Nisbet, John
Date: 2018.08.27 11:30:31
4700F

TIMBER SIGN SUPPORT

STANDARD PLAN G-22.10-04

SHEET 2 OF 3 SHEETS

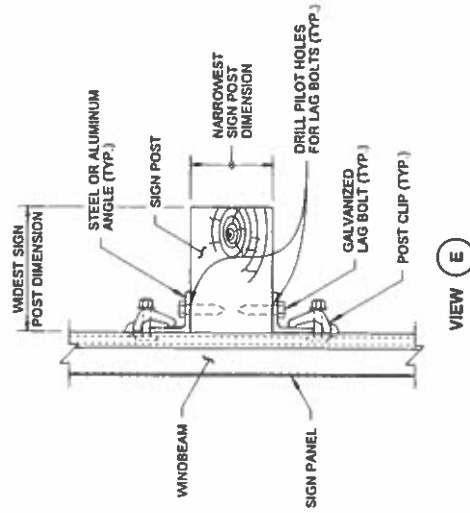
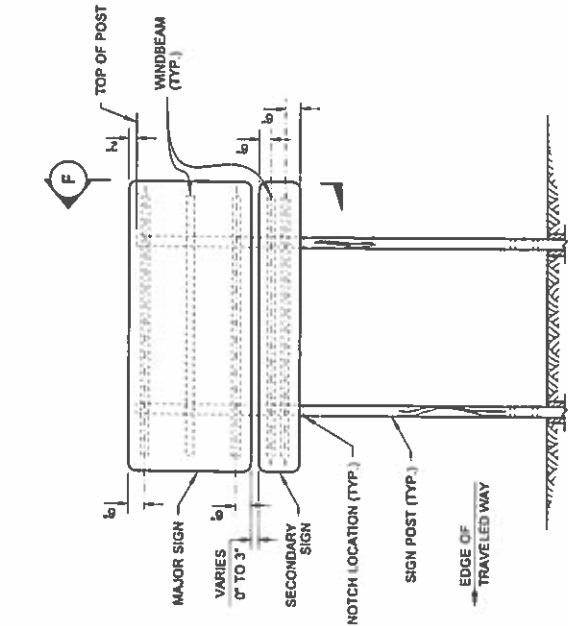
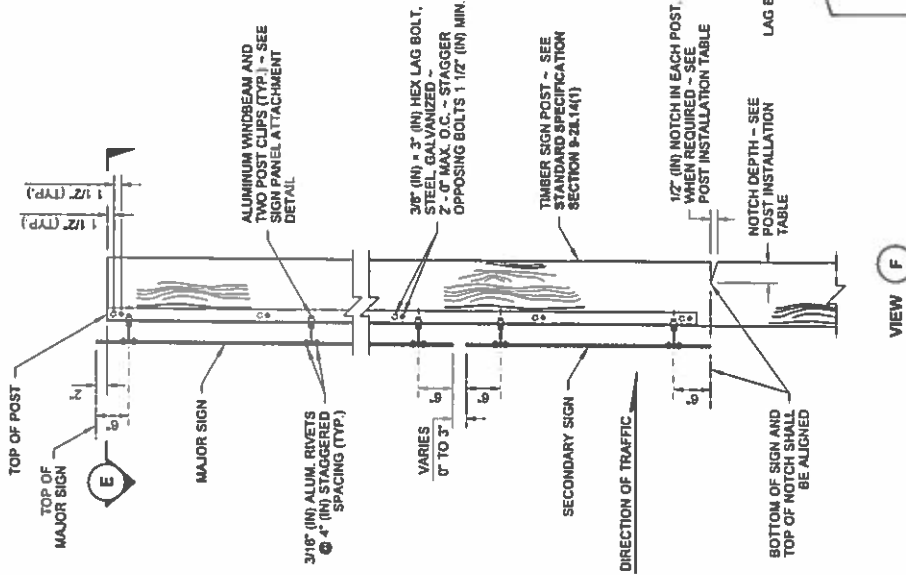
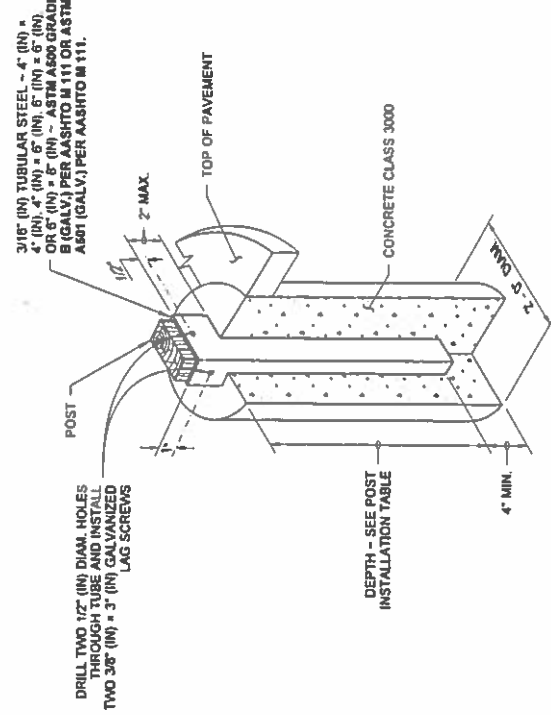
APPROVED FOR PUBLICATION

James, Jeff

Jun 23 2018 10:47 AM



Washington State Department of Transportation



Nisbet, John
Digitally signed by Nisbet, John
Date: 2018.08.27 11:32:12
+0700

TIMBER SIGN SUPPORT

STANDARD PLAN G-22.10-04

SHEET 3 OF 3 SHEETS

APPROVED FOR PUBLICATION

FILED: 08/28/2018 10:42 AM

Washington State Department of Transportation



EXHIBIT “E”

Olympic Region Traffic Management Center

(TMC) Requirements

The Olympic Region Traffic Management Center (TMC) is the central resource for tracking highway traffic activity reporting relative to all maintenance, construction, and other highway work activities that are or will be occurring in the Region. The TMC is staffed 24 hours a day seven days a week. Traffic impact activities to be called in and reported by the permit holder include, but are not limited to, the following:

- Any lane closure on a state highway.
- Any shoulder closure on a state highway in the more urban higher traffic volume areas.
- Any work activity of any kind on a state highway limited access freeway.
- Any work activity that may or does cause traffic delays or other distractions to the traveling public on a state highway.

The permit holder shall call the TMC at (253) 538-3300 each time a possible traffic impact activity is about to commence or occurs. The permit holder shall call the TMC 30 minutes in advance of the activity commencing, during the activity if conditions arose that initially did not require the call-in, and at the conclusion of any activity that was reported. Information that shall be provided to the TMC each time an activity begins shall include the following:

- Name of caller,
- State Route (SR) number,
- SR milepost if known, or other description adequately describing the location of the activity (e.g. nearest intersection),
- Brief description of the activity that is about to start,
- The expected duration of the activity that is about to occur,
- Permit number allowing the work,
- Contact names and phone number(s) that allow for direct communication between the TMC and the person(s) onsite that is/are in charge of the activity that is occurring.

Please note the TMC number listed above is to be used for official state business only, and is not a public number to be used for inquiries or other reporting of activities on the state highway system. Call 911 for emergencies, or other activities such as reporting a disabled vehicle on the shoulder.

EXHIBIT “F”

[illegible]

ACCEPTED AS NOTED

Kumiko
Izawa

Digitally signed by
Kumiko Izawa
Date: 2007.01.17
14:47:17

WSDOT TRAFFIC OPERATIONS

FREeways & EXPRESSWAYS	55-70 MPH	1500 ±
RURAL HIGHWAYS	50-65 MPH	800 ±
RURAL ROADS	45-55 MPH	500 ±

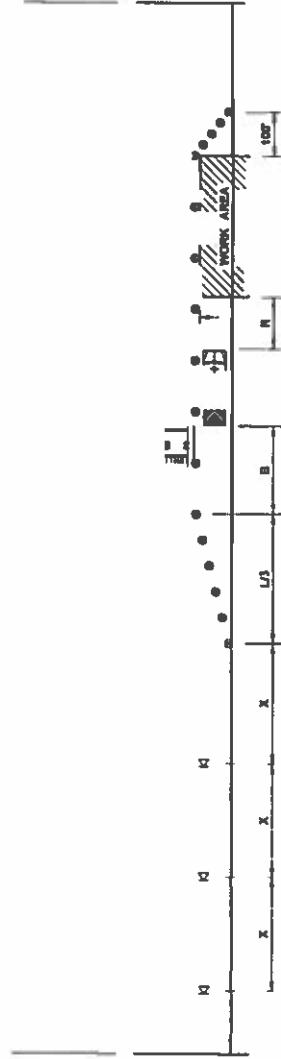
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP-AT-GRADE INTERSECTIONS AND DRIVEWAYS.

LONGITUDINAL BUFFER SPACE = B

	25	30	35	40	45	50	55	60	65	70
SPEED (MPH)										
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

HOST VEHICLE WEIGHT	HOST VEHICLE WEIGHT
9,900 TO 22,000 lbs.	> 22,000 lbs.

	< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH
100'	100'	123'	172'	74'	100'	150'



NOT TO SCALE

1. NO ENCRoACHMENT IN TRAVELED LANE IF ENCRoACHMENT IS NECESSARY, LANE SHALL BE CLOSED
2. DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20 (FT) O.C.
3. ALL SIGNS ARE BLACK ON ORANGE

NOTES

1. NO ENCRoACHMENT IN TRAVELED LANE IF ENCRoACHMENT IS NECESSARY, LANE SHALL BE CLOSED
2. DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20 (FT) O.C.
3. ALL SIGNS ARE BLACK ON ORANGE

FILE NAME S:\Doc1 in R PA S\4-Standard\2-Pass Street Library\9-Published PELUTC Work Zone Traffic Control\ C-4 Shoulder Closure\ 4.jpg
 TIME 9:31:14 AM
 Date/Time 9/21/10 9:31:14
 Operator PELUTC
 Station PELC1.MO

[illegible]

DESIGNED BY

AD CORTICES

CHICAGO 17

PROJ ENGR

REGIONAL ADM.	REVISION	DATE	BY
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Washington State

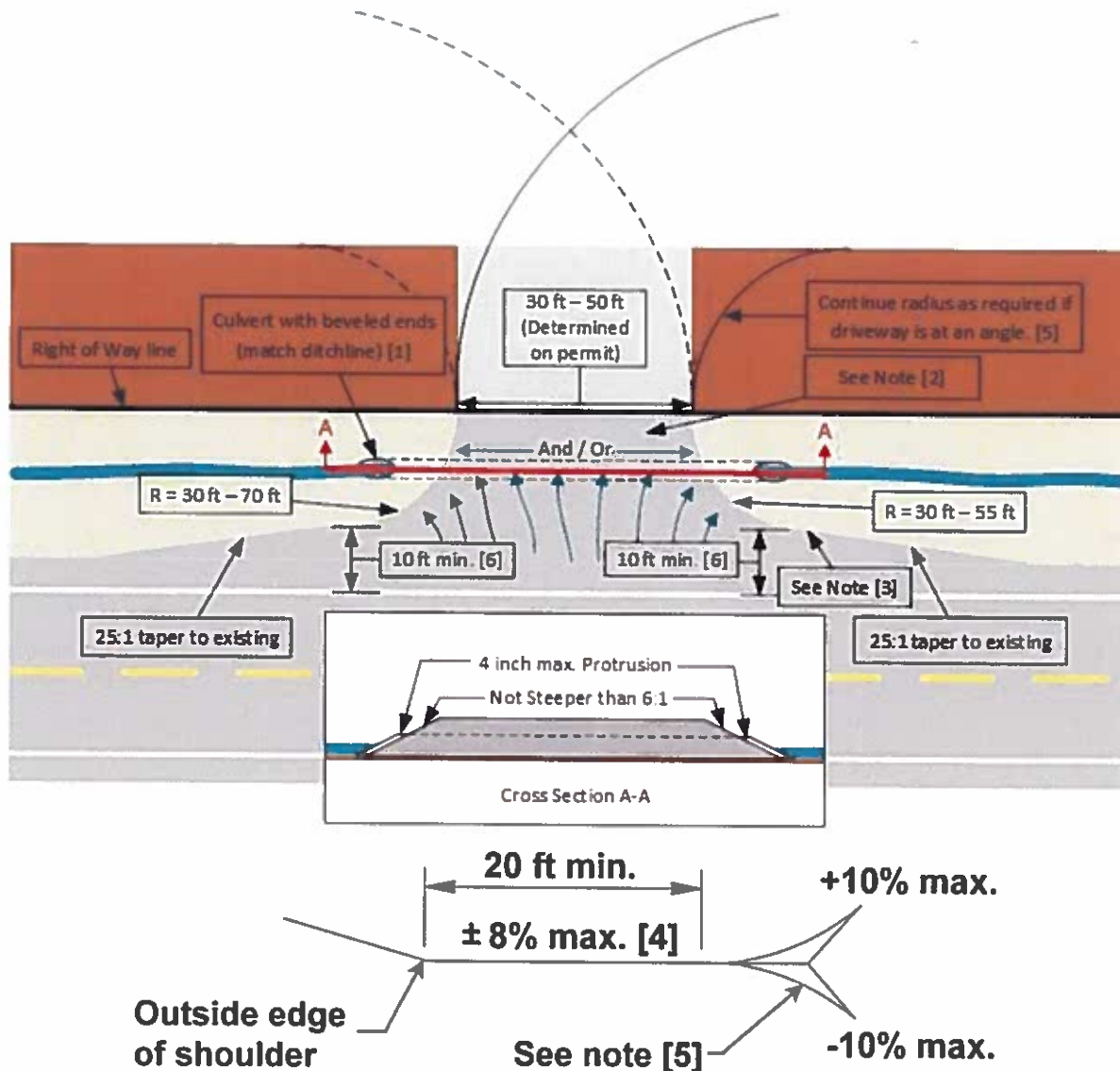
Department of Transportation

NAME

TRAFFIC CONTROL PLAN

EXHIBIT “G”

Exhibit 1340-2 Driveway Design Template SU-30 and Larger



Notes:

- [1] Culvert pipe with beveled end treatment (see Chapter 1600). See Hydraulics Manual, "Private Road Approach and Driveway Culverts" for details.
- [2] When the travel lanes are bituminous, a similar surface may be used on the approaches.
- [3] For mailbox location and type, see Section 1340.07, Chapter 1600.
- [4] Not to exceed $\pm 8\%$ maximum algebraic difference from shoulder slope.
- [5] Vertical alignment not to exceed a $\frac{3}{4}$ -inch hump or a 2-inch depression in a 10-foot chord.
- [6] Check turning template of driveway design vehicle